

DATE: May 12, 2010

FILE REF: 2460

TO: Timber Sale Reviewers/Partners

FROM: Jeffrey Olsen, NHAL Forestry Staff

SUBJECT: **PROPOSED TIMBER SALE ESTABLISHMENT for 2010/2011**

Please take some time to **review the sales and contact any of us with your input.**

There are 27 new sales on the list. There are 17 compartments listed in bold font that have been on previous lists and have yet to be set up. All sales are to target our FY11 goal of 4846 establishment acres. We are really focusing on our backlogged types. Please contact the forester above the sales you are interested in.

I believe this can help all of us be more efficient, effective and produce a better timber sale!

There is no deadline for comments. We will get together for an **annual public State Forest review of prescriptions and narratives June 17th.** Comments are best if given prior to the public meeting. These sales are now or soon to begin establishment work. They are in addition to the list of last year.

Old-growth management applied in Master Plan NCAs is noted by the letters NCMA following the sale name. Forest production is FPMA, recreation management by RMA and habitat management by HMA. I hope this helps you sort out the sale areas important to your program or interests.

This list and announcement has been an improvement to the roundtable process. Please email/call me or the establishing forester with our comments. The final review of sales prior to advertisement will be in September. If you wish to attend, please let me know.



**NHAL List of Sale Establishment for 2010/2011 Planning**  
**MAY 2010**  
NEW PRE-SALE LIST (regular font)

**Sales from the Previous List are in Bold Font**  
**These Compartments have already been reviewed, not yet set up.**

Todd Anderson

1. **C132H Allequash SW Sale, NCMA – Mixed Forest#12**
2. **C267H Lake Catherine Sale NCMA #9**
3. **C148H Little John Lake, NCMA #12**
4. **C98H: Nebish Lake FPMA#4**
5. C25H/C32H: Nixon Lake Road, Special Aquatic #13
6. C26H: Siphon/Salsich Creek Area FPMA #3, Special Aquatic #13, Garland & Salsich Springs Site
7. C29H: C372H: Ontonagon River/Hwy. B, FPMA #1 & #3
8. C62H, C63H: Little Gibson Lake Area, FPMA #3, NCMA #14
9. C2H/C3H: Tower Lake, FPMA
10. C123H: Wildcat Creek, FPMA #3
11. C189H: Camp Lake Area, FPMA #3
12. C208H: Old Hwy. 51, FPMA #3
13. C209H: Middle Gresham Lake, FPMA #3
14. C226H: Papoose Lk Boat Landing, FPMA #1

Jim Wetterau

1. C190, C211 East Boundary Sale, FPMA #3
2. C101, C102, C103, Witches Lake Road FPMA #4
3. C174, C175, Evergreen Lane FPMA #3
4. C170, C171, C180, C181, Day Lake FPMA #3

Paul Stearns

1. **C250H More Turtle Lake Road Sale III, FPMA**
2. **C135H Musky Lake Campground, RMA**
3. C96H, White Sand Lake NE, FPMA
4. C59H Johnson Lake Aspen FPMA#4

Kelly O'Neil

1. **C293H Thompson Trail, FPMA**
2. **C284H Plunkett Lake, NCMA#9, FPMA**
3. C56H Partridge Lake, NCMA#8, FPMA
4. C7H Lake Laura NW, NCMA#8
5. C145H Vandercook E, NCMA#12
6. C229H, 228H, 220H Rintleman Rd., FPMA
7. C195H, 196, 202, 203, 204 County Rd. K ROW, FPMA
8. C266H Fisher Lake Road, FPMA and NCMA#9

Craig Dalton

1. C22A/C29A - CTH D, Dorothy Lake FPMA
2. C39A - Windpudding NCA, FPMA
3. C73A - Swanson Lake NCA, FPMA
4. C214H - SW Devine Lake FPMA
5. C47H Deadman's Gulch Road FPMA
6. C113H Plum-Vitae/Witches Lake Road NCMA#12
7. C16A - West Sweeney, FPMA
8. C30A - Woodcock Research, FPMA
9. C32A - Horsehead Creek, FPMA
10. C54A - Oxbow Row Thin, FPMA
11. C108H - Old 70, FPMA

Jeff Olsen

1. C183H Sparkling Lake South and West. FPMA
2. C224H GI-WAY-DIN Trail Job BW/NH, FPMA
3. C264, 265 Turtle River Aspen and NH, FPMA

**Small Jobs, Possible Direct Sale Areas**

1. C157H Nichols Lake PJ. FPMA



Pre-Sale Narrative  
C25H / C32H  
Nixon Lake and Camp Two Roads Area

General Sale Description (including management goals and objectives): This proposed timber sale is located in compartments 25H and 32H, in the Towns of Plum Lake and Land O' Lakes. It is located in the Vilas Sandy Plains North Forest Production Management Area (FPA #3). And the Special Aquatic Native Community Management Area (NCMA #13), Salsich Creek Site. In the FPA, the goal is to maintain aspen as a strong and dominant component in the landscape, as well as maintain the presence of red and white pine in the landscape. The goal for the NCMA is to maintain aspen and jack pine in the uplands. In C25H a 39 year old red pine plantation will undergo a first thinning, a 60 year old red pine plantation will be thinned, and several stands of overmature aspen and jack pine will be clearcut. In C32H, a road side strip of overmature aspen and jack pine will be clearcut. Land type association is 212Jm02 and 212Jm205. The soils are sand, therefore precluding this sale from biomass harvesting. The topography is level to steep. The habitat type is PARV.

Ecological Consideration: The 39 year old red pine plantation is at 178 square feet of basal area, and will be row thinned to reduce the BA to about 110 square feet. The 60 year old small sawlog red pine plantation, at 175 square feet, will be reduced to about 120 square feet. The prolonged drought is causing significant mortality to the mature aspen. They will be regenerated in a coppice with standards harvest. The mature jack pine will be harvested as well, and allowed to naturally regenerate the areas in which they occur. In the NCMA of this compartment, the overmature aspen and jack pine will be cut, and the pine selectively removed. In C32H, the overmature aspen, jack pine and white birch in the roadside strip will be clearcut. The Natural Heritage Inventory was consulted and two hits occurred. One was for the gray wolf, this proposed sale falls within its pack territory and should have no impact upon the wolf. No known denning or rendezvous sites exist within the proposed sale area. The other hit was for spruce grouse, and the wildlife biologist was consulted and the recommendation was to harvest the jack pine and replant if necessary in order to maintain this cover type.

Water Quality Considerations: Best Management Practices (BMP's) for Water Quality will be incorporated into this timber sale. The residual basal area between 50 and 100 feet from the OHWM will be maintained at greater than 60 square feet per acre, with an emphasis on maintaining longer lived tree species, i.e. white spruce, white pine and red pine.

Aesthetic Considerations: Slash will be treated along the town roads. Longer lived red and white pine, as well as red oak will be retained.

Wildlife Considerations: Cavity trees exist throughout the sale area, which are used by animals for nesting and denning. These trees will contribute to the coarse woody debris accumulation on the forest floor over time. This area is used by game and non-game, birds amphibians and mammals. This sale will maintain a diversity of habitat conditions to support harvestable populations of the major forest game species. And it will increase the habitat used by non-game species. In addition, as reserve trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

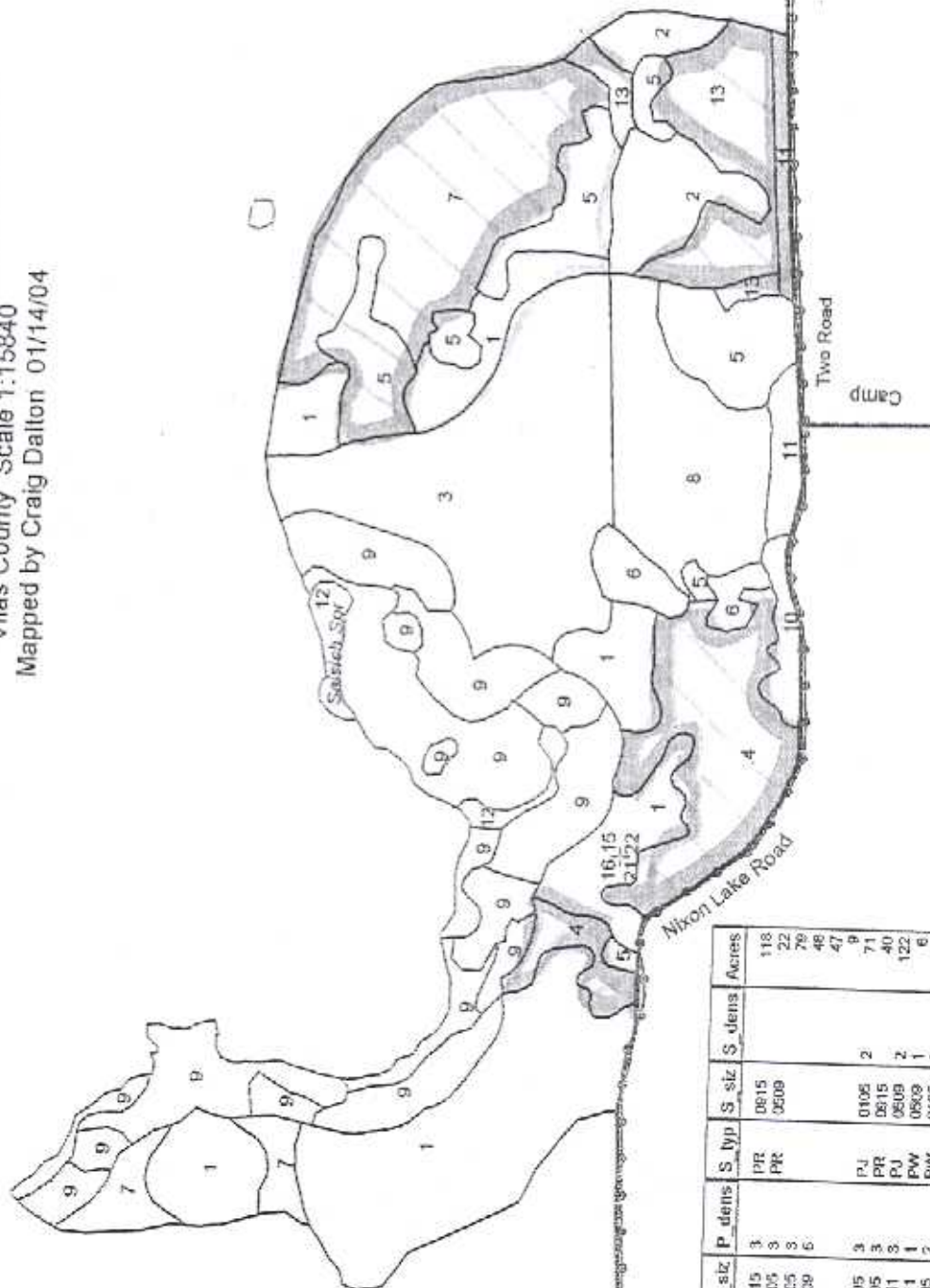
Recreation Consideration: Uses of this area include hunting, wildlife viewing, hiking and snowmobiling. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development. The snowmobile trail will be posted if logging occurs in the winter.

Resources of Special Consideration – Archeological/Historical Review: The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale.

Todd Anderson 2010

# COMPARTMENT 25

T42N R08E Sec. 14, 15, 16, 21, 22, 23  
 Northern Highland State Forest    Compartment Acreage = 610  
 Vilas County    Scale 1:15840  
 Mapped by Craig Dalton 01/14/04



Shld	P. typ	P. siz	P. dens	S. typ	S. siz	S. dens	Acres
1	O	1115	3	PR	0815		118
2	A	0105	3	PR	0509		22
3	FJ	0105	3				79
4	PR	0509	6				48
5	G						47
6	K						9
7	A	0105	3	PJ	0105	2	71
8	A	0105	3	PR	0815		40
9	BW	0511	3	PJ	0509	2	122
10	MR			PW	0809	1	6
11	A	0105	2	BW	0105	1	11
12	LM						7
13	A	0105	3	PR	0509	1	30

Nixon Roads  
 Trails  
 Open Water  
 Ashtella Areas  
 Compartment 25







## PRE-SALE NARRATIVE

C26H

### Siphon and Salsich Creek Area – Town of Land O' Lakes

General Sale Description: This proposed timber sale is located between Siphon and Salsich Creeks. It falls within two management areas. One area is the Vilas Sandy Plains North Forest Production Area (FPA #3), where goals include maintaining aspen as a strong component, but with greater stand diversity and older pines than exist today. The other area is the Special Aquatic, Garland and Salsich Springs Site (NCMA #13). A specific objective for this area is to use a variety of active management techniques to maintain aspen and jack pine in the uplands and to increase longer lived species through maintaining Best Management Practices for Water Quality (BMP's) in the vicinity of Salsich Creek. The FPA consists of numerous stands of overmature aspen ranging from 52 to over 80 years old. Some of these aspen stands straddle two management areas. Two jack pine stands occur in the FPA. One is upland, and the other is in a lowland sphagnum moss bog. Land type association is 212Jm02. Habitat type is PArV (Pinus – Acer rubrum/Vaccinium). The soils are sand, therefore excluding this sale from biomass harvesting. The topography is level to steep.

Ecological Consideration: The jack pine is in the FPA, and will be clearcut, with the goal of regenerating it naturally in the upland area. The lowland area will regenerate to black spruce. The aspen stands are scattered primarily in the western two thirds of the compartment, surrounded by a mix of different timber types of differing ages. The aspen in the FPA will be regenerated through a coppice with standards harvest, leaving residual sawlog red and white pine. In the NCMA, the aspen will be regenerated the same as in the FPA, per the Master Plan. The Natural Heritage Inventory was consulted and the only hit was for the Gray wolf. This sale falls within its pack territory and should have no impact upon the wolf. No known denning or rendezvous sites exist within the proposed sale area.

Water Quality Considerations: Best Management Practices (BMP's) for Water Quality will be incorporated into this timber sale. Muskeg of varying width occurs between the creek channel and the upland forest. The residual basal area between 50 and 100 feet from the OHWM will be maintained at greater than 60 square feet per acre, with an emphasis on maintaining longer lived tree species, i.e. white spruce, white pine, red pine.

Aesthetic Considerations: Longer lived red and white pine, as well as red oak will be retained. Slash will be kept away from the woods roads.

Wildlife Considerations: Cavity trees exist throughout the sale area, which are used by animals for nesting and denning. These trees will contribute to the coarse woody debris accumulation on the forest floor over time. This area is used by game and non-game, birds, amphibians and mammals. This sale will maintain a diversity of habitat conditions to support harvestable populations of the major forest game species. And, it will increase the habitat used by non-game species. In addition, as reserve trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

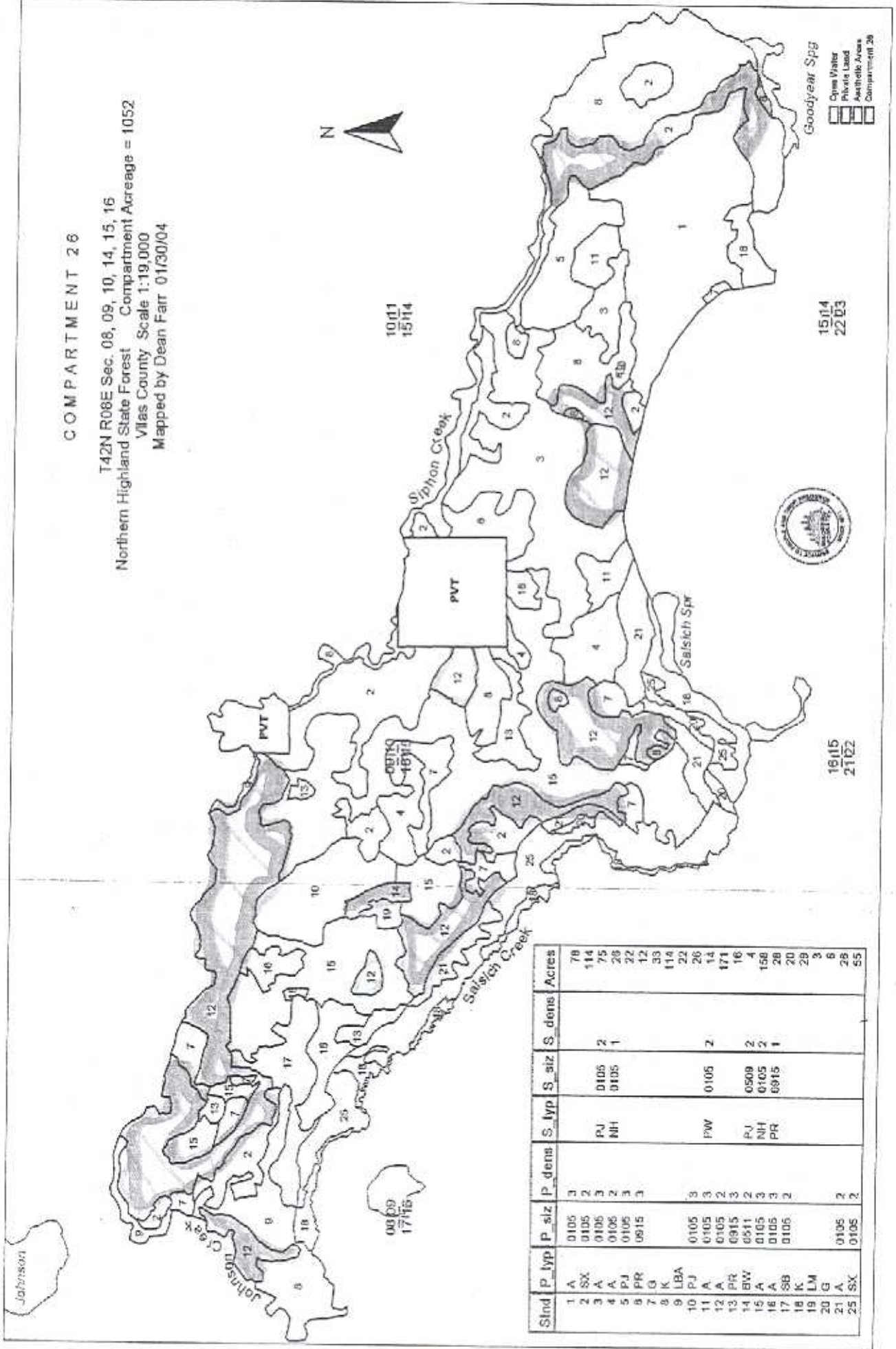
Recreation Considerations: Uses of this area include hunting, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development.

Resources of Special Concern Consideration – Archeological/Historical Review: The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale.

Todd Anderson 2010

# COMPARTMENT 26

T42N R08E Sec. 08, 09, 10, 14, 15, 16  
 Northern Highland State Forest    Compartment Acreage = 1052  
 Vilas County    Scale 1:19,000  
 Mapped by Dean Farr 01/30/04





PRE-SALE NARRATIVE  
C29H / C372H  
Ontonagon River / Hwy. B Town of Land O' Lakes

General Sale Description (including management goals and objectives): This proposed timber sale is located in the Town of Land O' Lakes, between Hwy B and the Ontonagon River. It is located in the Wineger Moraines and Vilas Sandy Plains North Forest Production Areas (FPA #1 & #3). Part of this sale will be in the recently acquired Hovel tract. The management goal for FPA #1 is to maintain and enhance the existing stand of northern hardwoods to increase age diversity and to maintain stand health and vigor. Another management goal for the FPA is to provide for the sustainable production of timber and other forest products, long term visual appeal and ecological attributes that are characteristic of older forests where appropriate. Since a portion of the sale is also located along Hwy. B, aesthetics will be a consideration in this part of the timber sale. The strip along Hwy B consists of overmature aspen, with a component of northern hardwoods. In the south part of the former Hovel tract is a stand of small sawlog white pine that was marked for harvest, but never cut, as well as a stand of unmarked pine. And between this stand and the Ontonagon River is a stand of overmature aspen with a dense understory of balsam fir. However, the majority of the sale area will be pole timber northern hardwood. This sale falls in both the 212Jc05 and 212Jm05 land type associations. Biomass will be allowed to be harvested from this timber sale.

Ecological Considerations: The strip along Hwy. B will remove only the overmature aspen, and selectively marked hardwoods. The objective is to remove the aspen component and develop an all-aged stand of northern hardwoods. The white pine stand will be remarked, since it has been approximately 5 years since it was first marked, and the adjoining small sawlog stand of pine, at 160 square feet of BA will be thinned. The target residual basal area is 120 to 130 square feet per acre. Stand 3 in C29H is an overmature stand of aspen that will be regenerated through coppice with standards, leaving scattered white spruce as leave trees. The white spruce will be susceptible to wind throw, but contribute as a seed source, and future coarse woody debris on the forest floor. A stand labeled as keg on the recon is actually small sawlog red pine, with a BA of 190 square feet. This too will be thinned to 120 to 130 square feet of BA per acre. The Natural Heritage Inventory was consulted and there were no hits.

Water Quality Considerations: Best Management Practices (BMP's) for Water Quality will be incorporated into this timber sale. Muskeg of varying width occurs between the Ontonagon River channel and the upland forest. No trees will be harvested between the ordinary high water mark (OHWM) and 50 feet landward. The residual basal area between 50 feet and 100 feet from the OHWM will be maintained at greater than 60 square feet per acre, with an emphasis on maintaining longer lived tree species, i.e. white spruce, white pine, red pine, and northern white cedar.

Aesthetic Considerations: There are two areas of aesthetic consideration, Hwy. B and along the Ontonagon River. The portion along Hwy. B will be a selective harvest, with the slash treated along the highway. The portion along the river will have a higher density of trees, as well as a balsam fir understory screen.

Wildlife Considerations: This area is used by game and non-game, birds, amphibians and mammals. This harvest will result in opening up the understory in the hardwood and pine stands, diversifying the flora and increasing the vertical structure. As trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

Recreation Consideration: Uses of this area include hunting, trapping, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development.

Resources of Special Concern Considerations (archeological/historical review required on Department lands): The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale.

Todd Anderson 2010



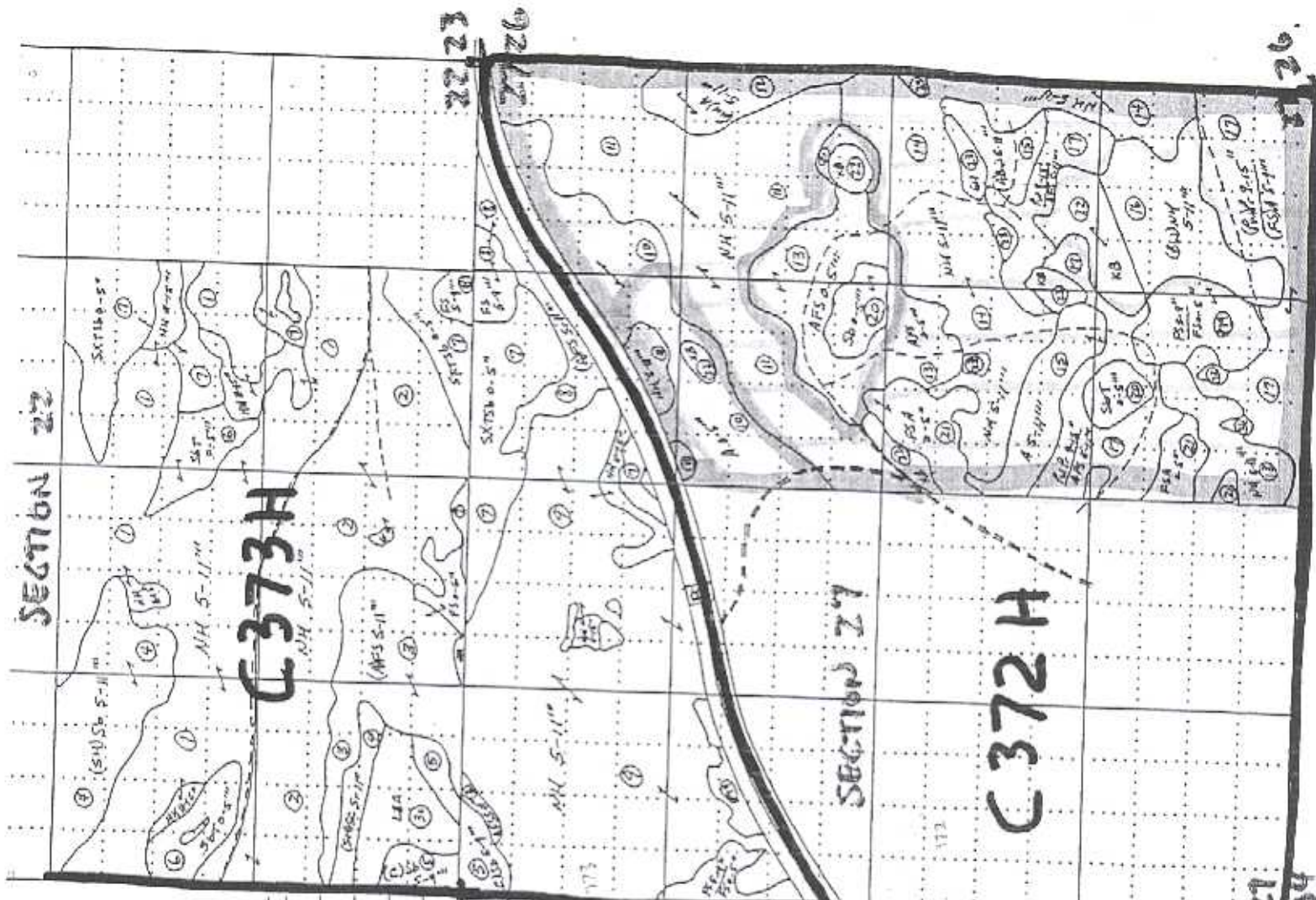
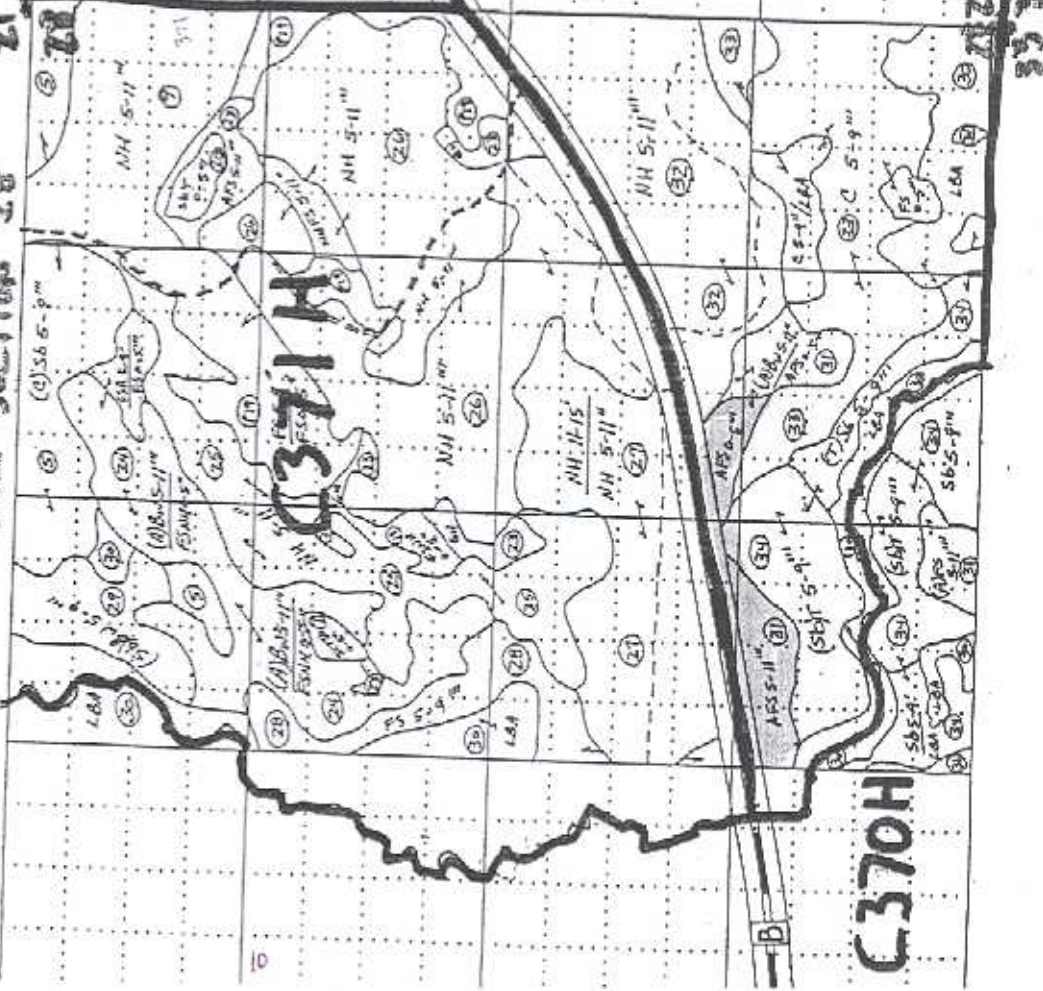
STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
MADISON, WISCONSIN 53707

FOREST TAX MAP  
FORM 2450-14

REV. 2-85

OWNER'S NAME <b>WONR NAAL</b>		LEAVE BLANK - MADISON OFFICE USE ONLY	
STREET OR ROUTE		YEAR OF ENTRY	ORDER NO.
CITY, STATE, ZIP CODE		ACRES ENTERED	
TOWN <b>Land O' Lakes</b>		COUNTY <b>Vilas</b>	
TOWNSHIP <b>43N</b>		RANGE <b>8</b>	SECTION <b>28</b>

SECTION DIAGRAM  
0" = 1 Mile



Compartment No. 29

T 43N R 8E Secs 34, 35

Co. Vilas Fl. No. 11 Photo No. MPE 364,365

Mapped by J. Kenna Date 4-16-63

Comp. Acreage = 374

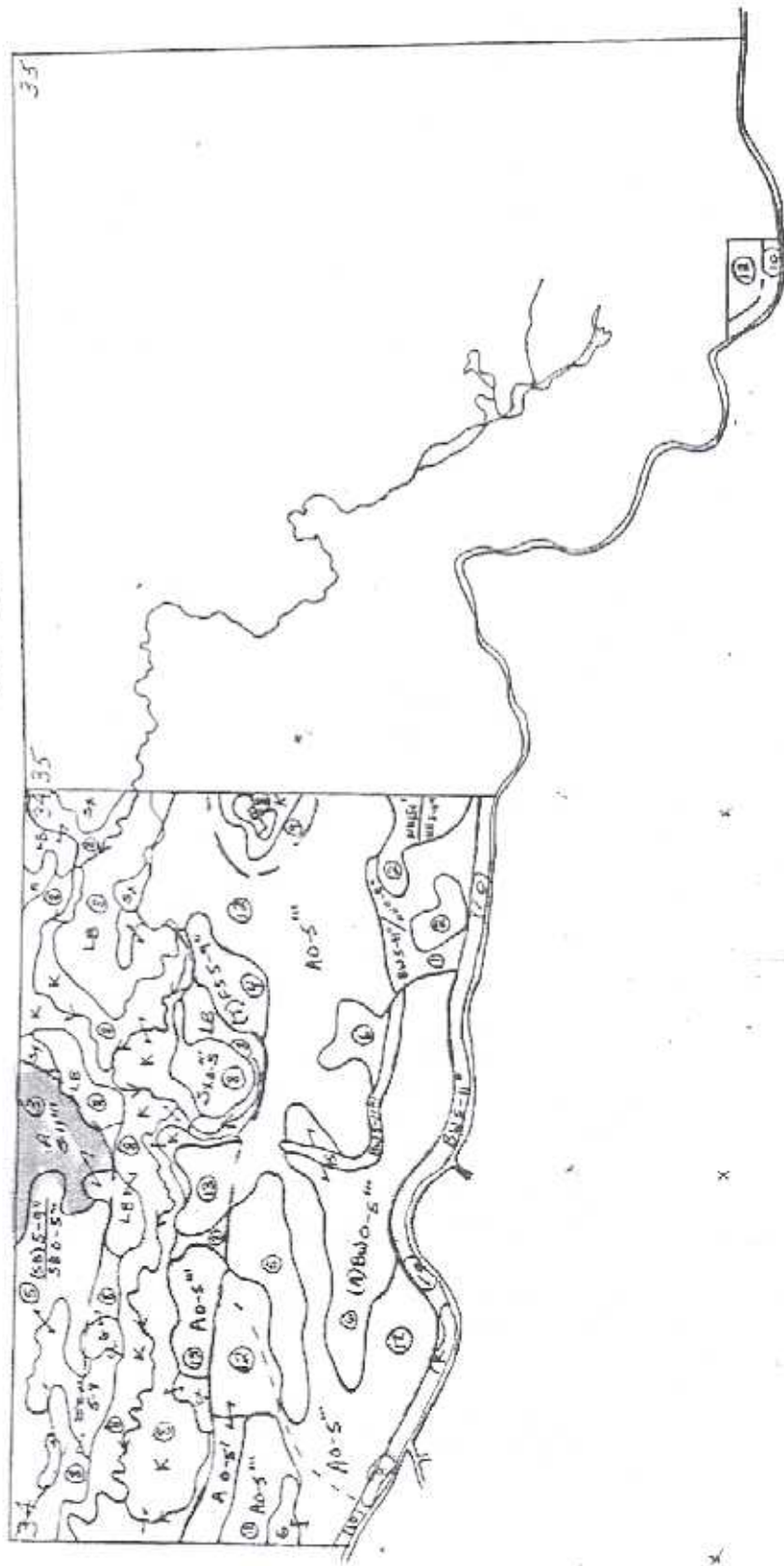
Updated 8/92 B1

Scale 1:16,000

Updated 1976 JR

" 2/88 RJ

" 5/89 S.G.





PRE-SALE NARRATIVE  
C59H / C62H / C63H  
Little Gibson Lake Area – Town of Land O' Lakes

General Sale Description: This proposed timber sale is located to the east of Little Gibson Lake, on both sides of High Lake Road. This sale falls in two management areas. Compartment 62H is in the Vilas Sandy Plains North, Forest Production Management Area (FPMA #3). Compartments 59H and 63H are in the Johnson Lake Barrens (Johnson Creek Pine Site) Native Community Management Area (NCMA #14). The goal of the sale in the FPA is to develop a primarily mixed forest with areas dominated by older red and white pine with aspen, white birch and red oak as important secondary species. The goal in the NCMA will be to maintain an early successional, harvest driven older jack pine community. C62H contains a stand of natural origin small sawlog red pine, and a strip of overmature aspen along High Lake Road. C59H and C63H contains a stand of overmature aspen and jack pine, some of which occurs along the town road. Habitat type is PArV (Pinus – Acer rubrum/Vaccinium). The majority of the soils in the sale area are sandy, thus precluding a biomass harvest. The topography is level to steep. Land type association is 212Jm02.

Ecological Consideration: The red pine in Stand 4 in C62H was last thinned in 1977. It is now at 180 square feet basal area per acre, which will be reduced to between 100 to 120 square feet per acre. The red pine will be thinned using low and crown thinning techniques, following the standard order of removal for red pine. The aspen in stands 3, 15, and 16 along the town roads, are strips that were left uncut in the 1977 sale. They will be regenerated in a coppice with standards harvest. In C63H, in 1981, only the marked aspen were removed on the south side of High Lake Road between the private land and the woods road to the east. Stand 13, C59H, is overmature aspen, which was part of a sale in 1967, but never harvested. This stand will be clearcut, and converted to jack pine. Maple and red oak saplings will be retained along the town road to leave a component of longer lived trees for their visual characteristics. A search of the NHI database yielded no hits.

Water Quality Considerations: Best Management Practices for Water Quality will be followed to protect adjacent wetlands.

Aesthetic Considerations: Longer lived red oak, as well as red oak and red maple seedlings will remain in the roadside strip. The slash will be treated.

Wildlife Considerations: Cavity trees exist throughout the sale area, which are used by animals for nesting and denning. These trees will contribute to the coarse woody debris accumulation on the forest floor over time. This area is used by game and non-game, birds, amphibians and mammals. This harvest will result in opening up the understory in the pine stand, diversifying the flora and increasing the vertical structure. This will maintain a diversity of habitat conditions to support harvestable populations of the major forest game species. And, it will increase the habitat used by non-game species. In addition, as trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

Recreation Considerations: Uses of this area include hunting, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development.

Resources of Special Concern Consideration – Archeological/Historical Review: The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale.

Todd Anderson 2010

PRE-SALE NARRATIVE  
C59H / C62H / C63H  
Little Gibson Lake Area - Town of Land O' Lakes

General Sale Description: This proposed timber sale is located to the east of Little Gibson Lake, on both sides of High Lake Road. This sale falls in two management areas. Compartment 62H is in the Vilas Sandy Plains North, Forest Production Management Area (FPMA #3). Compartments 59H and 63H are in the Johnson Lake Barrens (Johnson Creek Pine Site) Native Community Management Area (NCMA #14). The goal of the sale in the FPA is to develop a primarily mixed forest with areas dominated by older red and white pine with aspen, white birch and red oak as important secondary species. The goal in the NCMA will be to maintain an early successional, harvest driven older jack pine community. C62H contains a stand of natural origin small sawlog red pine, and a strip of overmature aspen along High Lake Road. C59H and C63H contains a stand of overmature aspen and jack pine, some of which occurs along the town road. Habitat type is PArV (Pinus - Acer rubrum/Vaccinium). The majority of the soils in the sale area are sandy, thus precluding a biomass harvest. The topography is level to steep. Land type association is 212Jm02.

Ecological Consideration: The red pine in Stand 4 in C62H was last thinned in 1977. It is now at 180 square feet basal area per acre, which will be reduced to between 100 to 120 square feet per acre. The red pine will be thinned using low and crown thinning techniques, following the standard order of removal for red pine. The aspen in stands 3, 15, and 16 along the town roads, are strips that were left uncut in the 1977 sale. They will be regenerated in a coppice with standards harvest. In C63H, in 1981, only the marked aspen were removed on the south side of High Lake Road between the private land and the woods road to the east. Stand 13, C59H, is overmature aspen, which was part of a sale in 1967, but never harvested. This stand will be clearcut, and converted to jack pine. Maple and red oak saplings will be retained along the town road to leave a component of longer lived trees for their visual characteristics. A search of the NHI database yielded no hits.

Water Quality Considerations: Best Management Practices for Water Quality will be followed to protect adjacent wetlands.

Aesthetic Considerations: Longer lived red oak, as well as red oak and red maple seedlings will remain in the roadside strip. The slash will be treated.

Wildlife Considerations: Cavity trees exist throughout the sale area, which are used by animals for nesting and denning. These trees will contribute to the coarse woody debris accumulation on the forest floor over time. This area is used by game and non-game, birds, amphibians and mammals. This harvest will result in opening up the understory in the pine stand, diversifying the flora and increasing the vertical structure. This will maintain a diversity of habitat conditions to support harvestable populations of the major forest game species. And, it will increase the habitat used by non-game species. In addition, as trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

Recreation Considerations: Uses of this area include hunting, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development.

Resources of Special Concern Consideration - Archeological/Historical Review: The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale.

Todd Anderson 2010



Pre-Sale Narrative  
C62H  
High Lake Area – Town of Land O' Lakes

General Sale Description (including management goals and objectives): This proposed timber sale is located in Compartment 62H, in the Town of Land O' Lakes. It is between High Lake and High Lake Road. It is located in the Vilas Sandy Plains North Forest Production Management Area (FPA #3). The long term goal in this area is to develop a mixed forest, dominated by red and white pine, with older red oak as an important secondary species. Two stands are dominated by 90 year old red oak, with a northern hardwood component, and white pine seedling/sapling understory. Another stand is a mixture of red oak, maple, white birch and sawlog red pine. The soils are well drained Pence sandy loam, and the terrain is level. Biomass harvesting will be allowed on this sale. Land type association falls in both 212Jm02 and 212Jm05. Habitat type ranges between PArVAa (Pinus-Acer rubrum/Vaccinium-Aralia) and AVVb (Acer/Vaccinium-Viburnum).

Ecological Considerations: These stands were last harvested in 1988. They were opened up sufficiently to encourage a well developed understory of white pine to grow. This sale will be a red oak shelterwood, with the objective of regenerating red oak through stump sprouting and release of red oak seedlings. In addition, the white pine will be released as well. The Natural Heritage Inventory was consulted and the only hit was for the Gray wolf. This sale falls within its pack territory and should have no impact upon the wolf. No known denning or rendezvous sites exist within the proposed sale area.

Water Quality Considerations: There are no lakes, streams or wetlands within the proposed timber sale area.

Aesthetic Considerations: Slash will be treated along the town road.

Wildlife Considerations: This harvest will result in releasing small tree seedlings that will support a wide range of wildlife. Cavity trees exist throughout the sale area, which are used by animals for nesting and denning. These trees will contribute to the coarse woody debris accumulation on the forest floor over time.

Recreation Consideration: Uses of this area include hunting, trapping, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development.

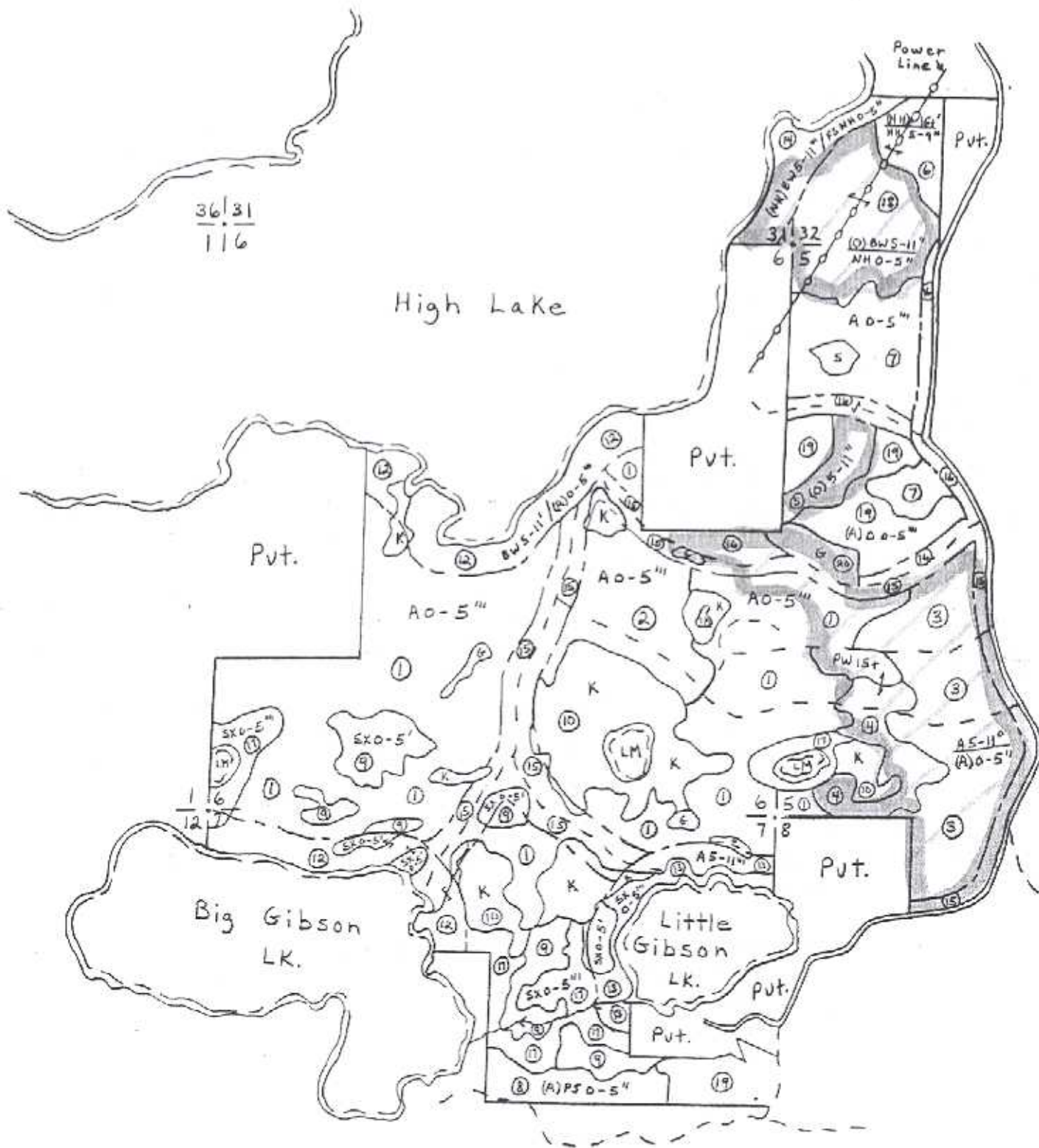
Resources of Special Concern Considerations (archeological/historical review required on Department lands): The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale

Todd Anderson 2010



Compartment 62

T42 N, R7 E, Secs. 1 & 12; T42 N, R8 E, Secs. 5, 6, 7 & 8;  
T43 N, R8 E, Secs. 31 & 32; Vilas Co. Fl. No. 18, Photo DXD 313  
Mapped by D. Farr, Date 8-27-84, Scale 1:15,840  
Updated 1/90 ~~24~~ Comp. Acreage = 734



Compartment No. 63

T 42 N R 8 E Secs 7, 8, 17 & 18

Co. Vibs Fl. No. 12 379,380  
Photo No. MPF 428,429

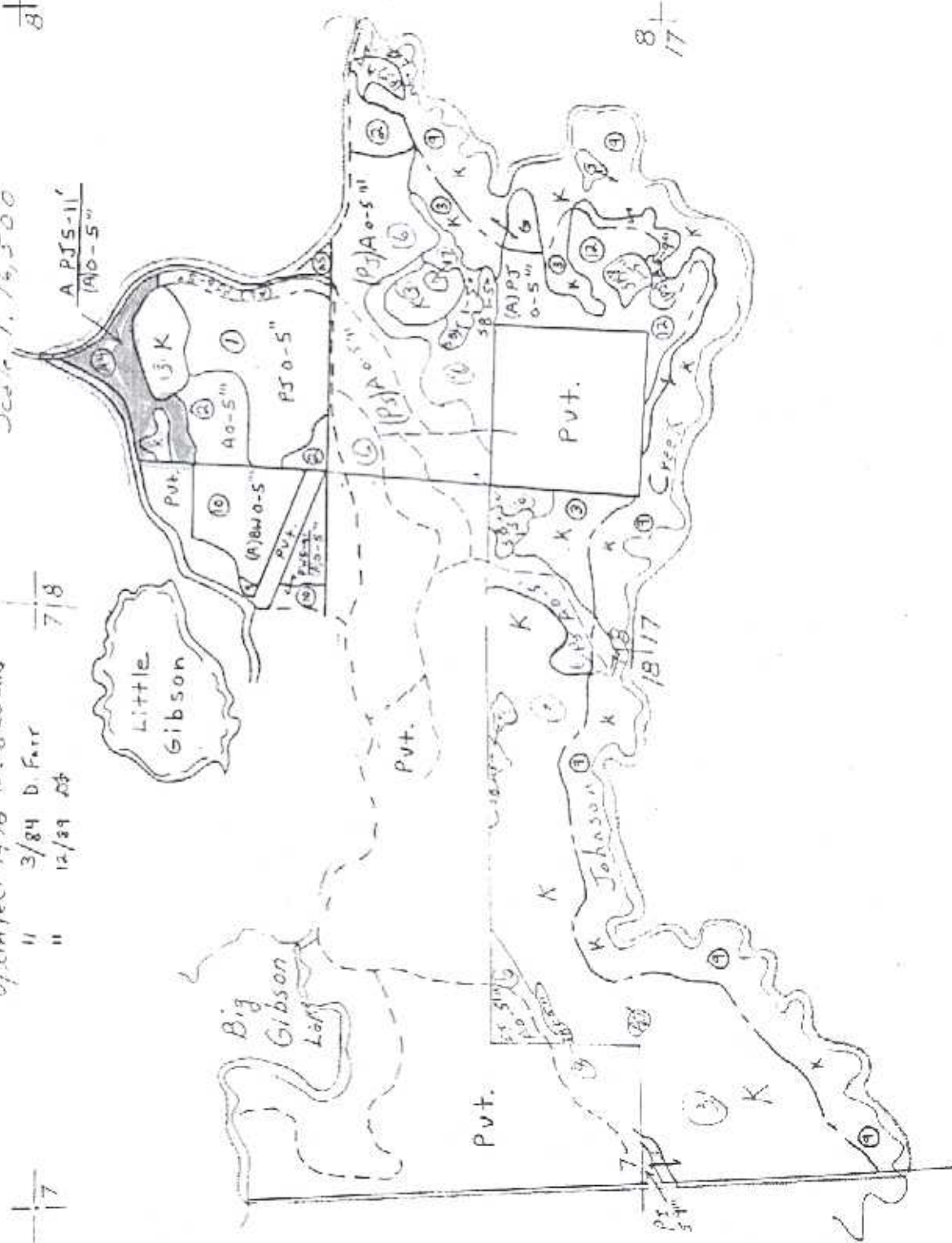
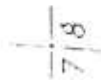
My Dear Mr. H. K.

Updated 1976 & 82

11	3/84 D. Farr
11	12/89 Df

Comp. Acreage = 499

Scale 1: 16,500



877

PRE-SALE NARRATIVE  
C2H / C3H  
Tower Lake – Town of Land O' Lakes

General Sale Description: This proposed timber sale is located near Tower Lake. It consists of several stands of overmature white birch and a stand of natural origin small sawlog red pine. This sale is in the Vilas Sandy Plains North Forest Production Area (FPA #3). The goal of this timber sale is to develop a primarily mixed forest with areas dominated by older red and white pine with aspen, white birch and older red oak as important secondary species. Best Management Practices for Water Quality (BMP's) will be implemented to protect Tower Lake and the adjacent wetlands. Land type association is 212Jm02. Habitat type is PArV (Pinus – Acer rubrum/Vaccinium). The soils are sand, therefore precluding this sale from biomass harvesting. The topography is level to steep.

Ecological Consideration: The white birch is growing in three stands. One had been underplanted with white pine in 1995, which are growing very well. This sale will release them from the understory. The second birch stand has a dense balsam fir understory, which will be cut in order to promote the regeneration of white birch. The third stand, on the north side of Tower Road, has a small sawlog white pine as the secondary type. The red pine stand, at 197 square feet of basal area per acre, will be thinned to a residual basal area ranging between 120 and 130 square feet. The Natural Heritage Inventory was consulted and there were no hits.

Water Quality Considerations: Best Management Practices (BMP's) for Water Quality will be incorporated into this timber sale. The residual basal area between 50 feet and 100 feet from the OHWM of Tower Lake will be maintained at greater than 60 square feet per acre, with an emphasis on maintaining longer lived tree species, i.e. white spruce, white pine, red pine.

Aesthetic Considerations: Longer lived red and white pine, as well as red oak will be retained. Slash will be treated along the town road.

Wildlife Considerations: Cavity trees exist throughout the sale area, which are used by animals for nesting and denning. These trees will contribute to the coarse woody debris accumulation on the forest floor over time. This area is used by game and non-game, birds, amphibians and mammals. This sale will maintain a diversity of habitat conditions to support harvestable populations of the major forest game species. And, it will increase the habitat used by non-game species. In addition, as reserve trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

Recreation Considerations: Uses of this area include hunting, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development. Tower Road is a snowmobile trail, and this sale will not take place in the winter, so there will be no conflict with snowmobilers.

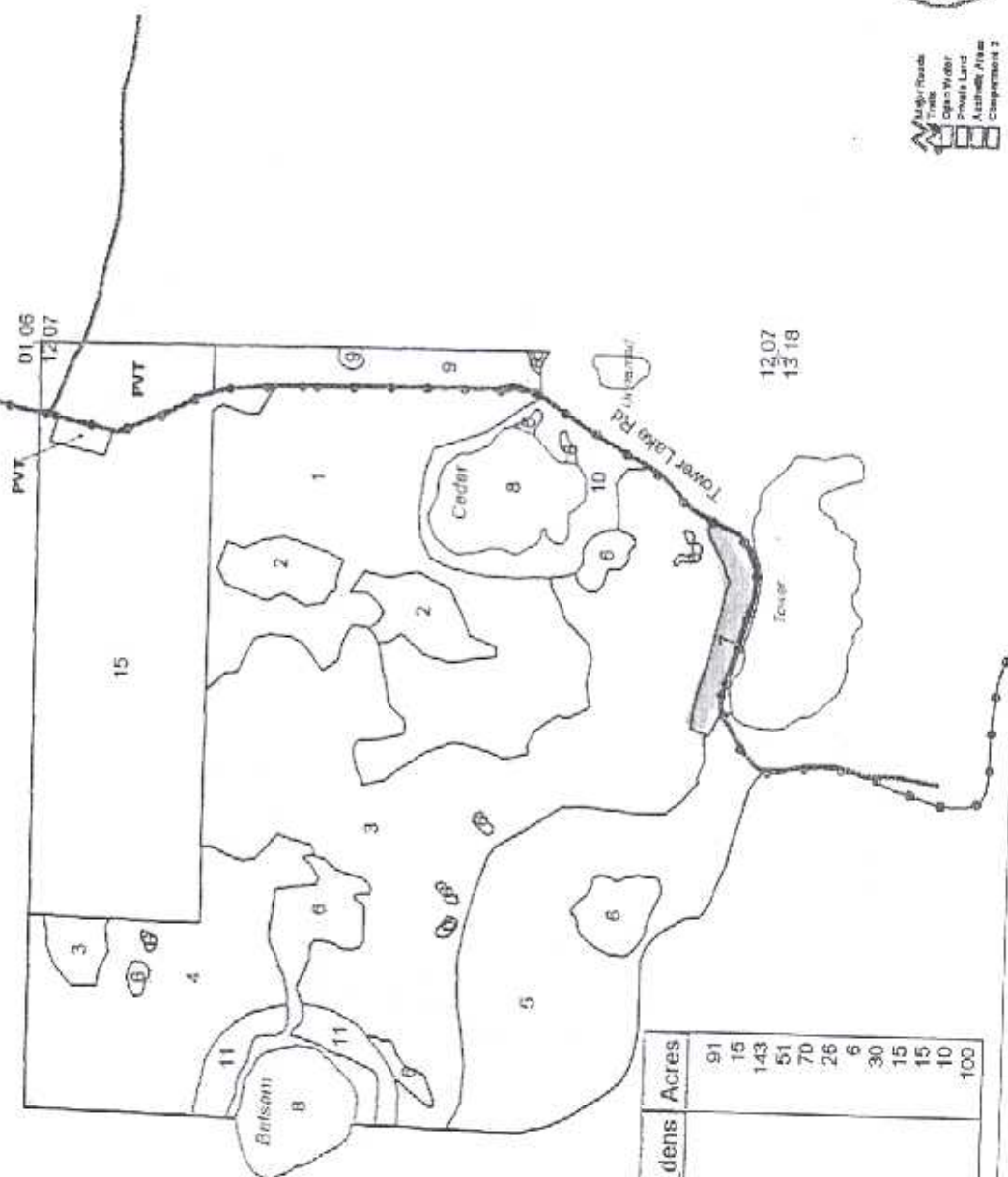
Resources of Special Concern Consideration – Archeological/Historical Review: The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale.

Todd Anderson 2010



# COMPARTMENT 2

T42N R08E Sec. 12  
 Northern Highland State Forest    Compartment Acreage = 572  
 Vilas County    Scale 1:15840  
 Mapped by Craig Dalton    12/18/02



Stnd	P_typ	P_siz	P_dens	S_typ	S_siz	S_dens	Acres
1	NH	1115	2	NH	0511	1	91
2	HH	1500	3	NH	1115	1	15
3	A	0105	3	BW	0105	1	143
4	A	0105	3	BW	0105	1	51
5	A	0105	3	PW	0105	2	70
6	K	0511	3	NH	0511	1	26
7	BW	0511	2	NH	0511	1	6
8	L	0511	2	NH	0511	1	30
9	BW	0511	2	NH	0511	1	15
10	BW	0511	2	BW	0511	1	15
11	A	0105	3	BW	0511	1	10
15	NH	0105	3	BW	0511	1	100

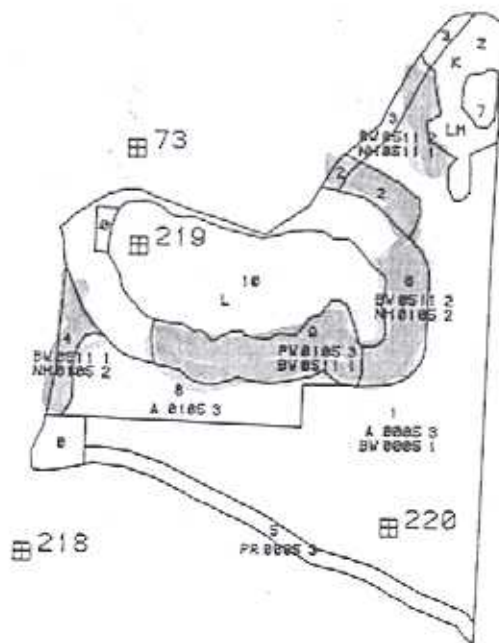


Major Roads  
 Trails  
 Open Water  
 Private Land  
 Aesthetic Area  
 Compartment 2

COMPARTMENT 3

NORTHERN HIGHLAND

SCALE 1:15840 PAUL SCHULTZ 11/95



PRE-SALE NARRATIVE  
C123H  
Wildcat Creek – Town of Presque Isle

General Sale Description (including management goals and objectives): This proposed timber sale is located in the Town of Presque Isle, on the north side of Wildcat Creek. This sale is located in the Vilas Sandy Plains North Forest Production Area (FPA #3). The management goal for the FPA is to provide for the sustainable production of timber and other forest products, and where appropriate long term visual appeal and ecological attributes that are characteristic of older forests. The stand to be harvested is sawlog red and white pine, with a component of early successional white birch and northern hardwoods. Land type association falls in 212Jm01. The COA is Trout Lake Pines, Northern Highland. The habitat type is PARV (Pinus-Acer rubrum/Vaccinium). Topography is level to rolling. The soil in this sale is sand, thus precluding a biomass harvest.

Ecological Considerations: This is stand 2, sawlog red and white, with a BA of about 175 square feet, which will be selectively thinned to approximately 130 square feet, favoring the larger and highest quality trees. The mature white birch will be removed as well, leaving scattered trees as a seed source, and future den and snag trees. The balsam fir and 1-5 inch hardwoods will be removed, which will encourage white pine seedlings to regenerate in the understory. The Natural Heritage Inventory was consulted and the only hit was for the Gray wolf. This sale falls within its pack territory and should have no impact upon the wolf. No known denning or rendezvous sites exist within the proposed sale area.

Water Quality Considerations: Best Management Practices (BMP's) for Water Quality will be incorporated into this timber sale. Muskeg of varying width occurs between the Ontonagon River channel and the upland forest. No trees will be harvested between the ordinary high water mark (OHWM) and 50 feet landward. The residual basal area between 50 feet and 100 feet from the OHWM will be maintained at greater than 60 square feet per acre, with an emphasis on maintaining longer lived tree species, i.e. white spruce, white pine, red pine, and northern white cedar.

Aesthetic Considerations: Slash along the woods road will be treated and kept back from the road.

Wildlife Considerations: This area is used by game and non-game, birds, amphibians and mammals. This harvest will result in opening up the understory in the oak and pine stands, diversifying the flora and increasing the vertical structure. This will maintain a diversity of habitat conditions to support harvestable populations of the major forest game species. And, it will increase the habitat used by non-game species. In addition, as trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

Recreation Consideration: Uses of this area include hunting, trapping, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development.

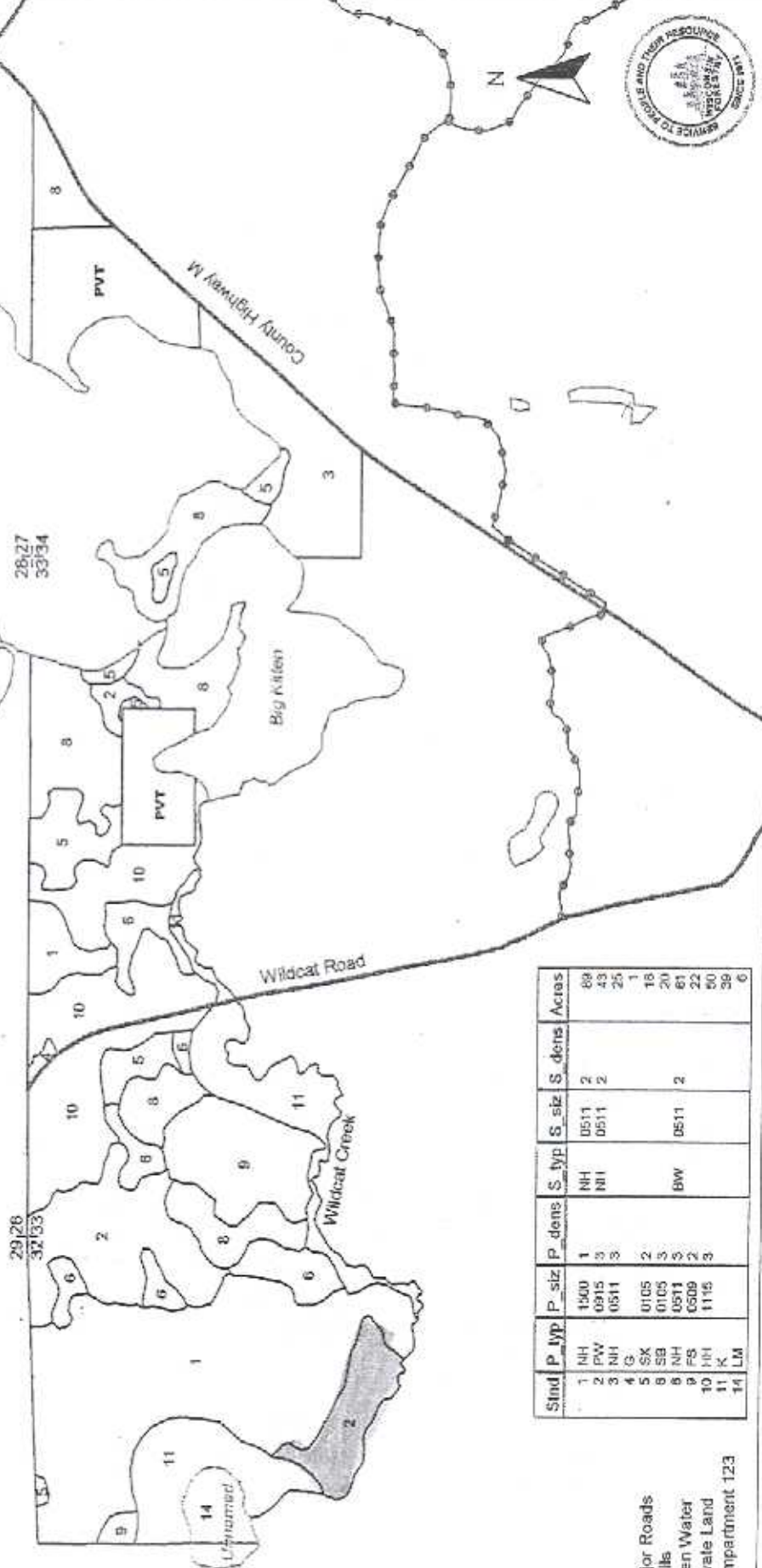
Resources of Special Concern Considerations (archeological/historical review required on Department lands): The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale

Todd Anderson 2010



# COMPARTMENT 123

T43N R07E Sec. 32, 33, 34  
 Northern Highland State Forest    Compartment Acreage = 374  
 Vilas County    Scale 1:15840  
 Mapped by Paul Schultz 09/02/04



Snd	P typ	P siz	P dens	S typ	S siz	S dens	Acres
1	NH	1500	1	NH	0511	2	88
2	PW	0315	3	NH	0511	2	43
3	NH	0511	3				25
4	G						1
5	SK	0105	2				18
6	SB	0105	3	BW	0511	2	20
8	NH	0311	3				61
9	FS	0309	2				22
10	NH	1115	3				50
11	K						39
14	LM						6

- Major Roads
- Trails
- Open Water
- Private Land
- Compartment 123



PRE-SALE NARRATIVE  
C189H  
Camp Lake Area – Town of Arbor Vitae

General Sale Description (including management goals and objectives): This proposed timber sale is located in the Town of Arbor Vitae, to the south of the Trout River. This sale is located in the Vilas Sandy Plains North Forest Production Area (FPA #3). The management goal for the FPA is to provide for the sustainable production of timber and other forest products, and where appropriate long term visual appeal and ecological attributes that are characteristic of older forests. This sale covers three stands. Stand 4 is a red maple stand with a sawlog red oak component. White birch, hard maple and balsam fir occur in varying densities throughout. Stand 9 is a poletimber red pine plantation that was planted in 1948. Stand 9 is a small sawlog red oak stand, with a pine sapling understory. Land type association falls in 212Jm02 and 212Jm06. The habitat type consists of both PARV (Pinus-Acer rubrum/Vaccinium) and AVVb (Acer/Vaccinium-Viburnum). Topography is level. The majority of the soils in the sale area are sandy, thus precluding a biomass harvest.

Ecological Considerations: The two oak stands contain red oak that are about 91 years old, which is mature on this habitat type. The goal of this sale is to maintain red oak in these stands. This will be accomplished by conducting a shelterwood harvest, removing the maple, birch and balsam fir, in order to enable more sunlight to reach the forest floor. This in turn will encourage the growth of red oak seedlings. The small sawlog red pine stand is at 180 square feet of basal area. This will be the second thinning in this plantation and will be selectively thinned to between 100 and 120 square feet of basal area per acre. This thinning will favor the larger and higher quality trees. The Natural Heritage Inventory was consulted and the only hit was for the Gray wolf. This sale falls within its pack territory and should have no impact upon the wolf. No known denning or rendezvous sites exist within the proposed sale area.

Water Quality Considerations: There are no lakes, streams or wetlands within the proposed timber sale area.

Aesthetic Considerations: Slash within 50 feet of the snowmobile trail will be treated to lie within 2 feet of the ground.

Wildlife Considerations: This area is used by game and non-game, birds, amphibians and mammals. This harvest will result in opening up the understory in the oak and pine stands, diversifying the flora and increasing the vertical structure. This will maintain a diversity of habitat conditions to support harvestable populations of the major forest game species. And, it will increase the habitat used by non-game species. In addition, as trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

Recreation Consideration: Uses of this area include hunting, trapping, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development. This sale will not take place during the winter, and thus not interfere with the snowmobile trail.

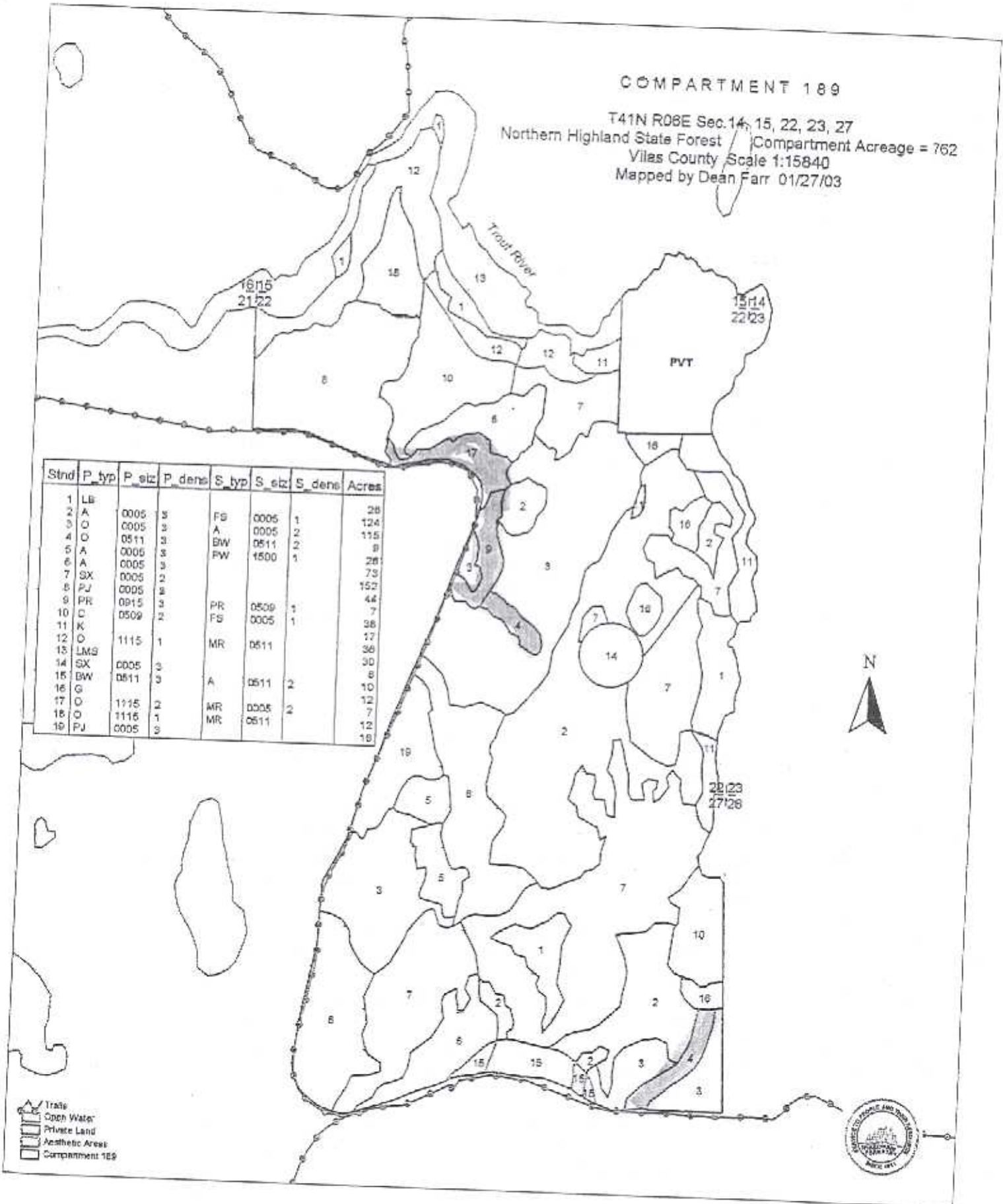
Resources of Special Concern Considerations (archeological/historical review required on Department lands): The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale.

Todd Anderson 2010



# COMPARTMENT 189

T41N R08E Sec. 14, 15, 22, 23, 27  
 Northern Highland State Forest  
 Vilas County  
 Scale 1:15840  
 Mapped by Dean Farr 01/27/03  
 Compartment Acreage = 762



PRE-SALE NARRATIVE  
C208H  
Old Hwy. 51 Area – Town of Boulder Junction

General Sale Description (including management goals and objectives): This proposed timber sale is located in the Town of Boulder Junction, west of Hwy 51, in the vicinity of Old Hwy. 51. This sale is located in the Vilas Sandy Plains North Forest Production Area (FPA #3). The management goal for the FPA is to provide for the sustainable production of timber and other forest products, and where appropriate long term visual appeal and ecological attributes that are characteristic of older forests. This sale covers four stands. Stand 4 is a small sawlog red pine plantation at 163 square feet of BA. Stand 6 is a 52 year old quaking aspen stand. Stand 19 contains overmature pin oak, white birch and aspen. Stand 21 is a pole timber pin oak stand, declining due to the extended drought. Land type association falls in 212Jm03. The habitat type is PARV (Pinus-Acer rubrum/Vaccinium). Topography is level. The soils in the sale area are sand, thus precluding a biomass harvest.

Ecological Considerations: Stand 4, at 163 square feet of BA, will be thinned to 120 square feet. Stand 6 is 52 year quaking aspen. The quality of growth on this sandy soil is poor, and the majority of this stand will be converted to jack pine, which is better suited to this site. Stand 19 contains overmature, early successional aspen and white birch, along with poor quality northern pin oak. Numerous have been blown down in a past windstorm. Select trees will be green marked for retention as green trees, or as future den and snag trees. Sawlog pine in this stand will be selectively thinned. Stand 21 is poor quality northern pin oak, and will be clearcut with the objective of releasing the seedling white pine, hastening the conversion of this stand to white pine, a species better suited to this site. The Natural Heritage Inventory was consulted and the only hit was for the Gray wolf. This sale falls within its pack territory and should have no impact upon the wolf. No known denning or rendezvous sites exist within the proposed sale area.

Water Quality Considerations: Stand 19 surrounds a very small lake. Best Management Practices (BMP's) for Water Quality will be incorporated into this timber sale. The residual basal area between 50 feet and 100 feet from the OHWM of the lake will be maintained at greater than 60 square feet per acre, with an emphasis on maintaining longer lived tree species, i.e. red and white pine.

Aesthetic Considerations: Slash within 50 feet of the Town and County roads, as well as along the snowmobile trail will be treated to lie within 2 feet of the ground.

Wildlife Considerations: This area is used by game and non-game, birds, amphibians and mammals. This harvest will result in opening up the understory in the oak and pine stands, diversifying the flora and increasing the vertical structure. This will maintain a diversity of habitat conditions to support harvestable populations of the major forest game species. And, it will increase the habitat used by non-game species. In addition, as trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

Recreation Consideration: Uses of this area include hunting, trapping, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development. The snowmobile trail will be posted if harvested occurs during the snowmobile season.

Resources of Special Concern Considerations (archeological/historical review required on Department lands): The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale

Todd Anderson 2010



# COMPARTMENT 208

T42N R06E Sec. 32, 33

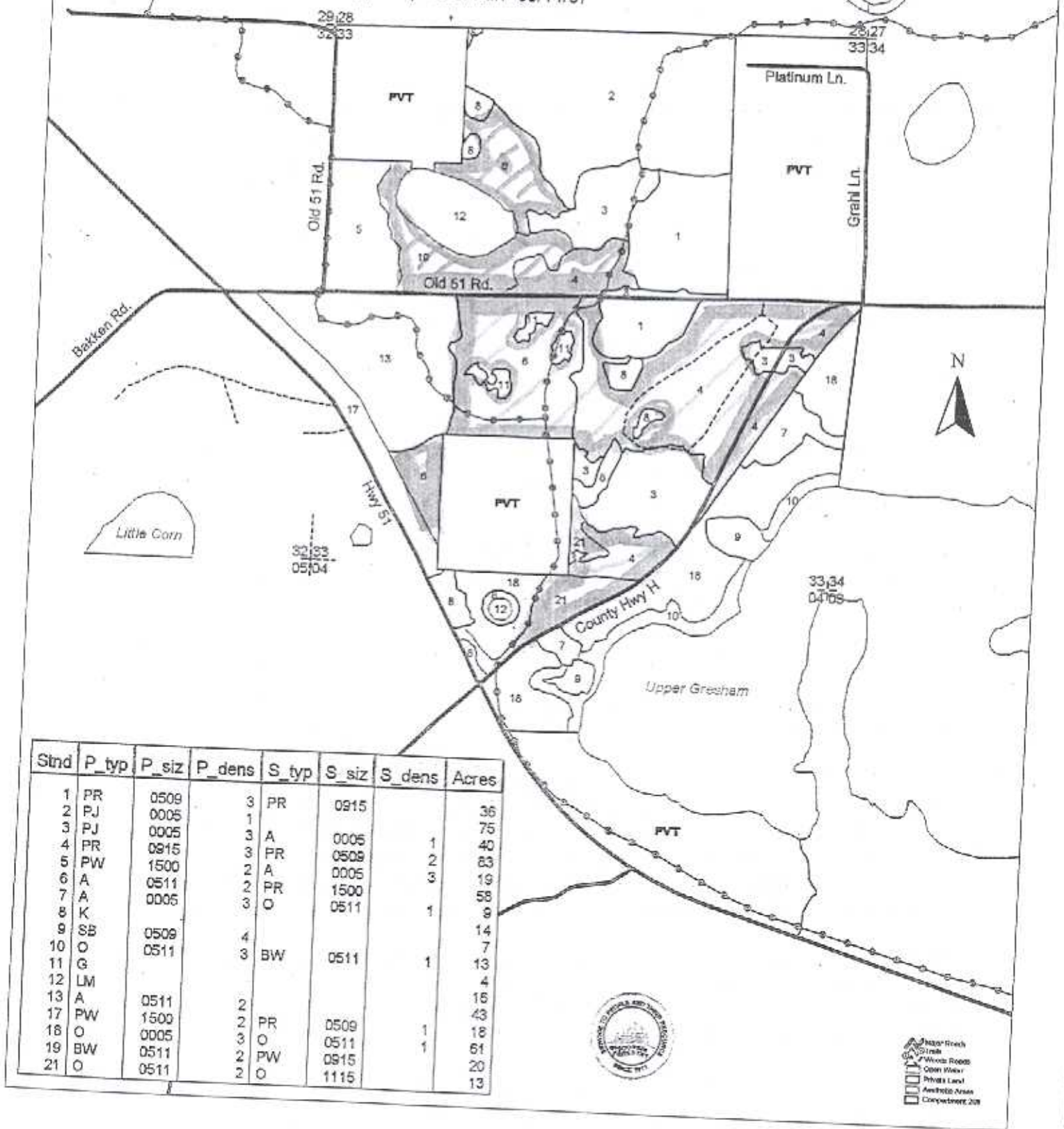
T41N R06E Sec. 04

Northern Highland State Forest

Compartment Acreage = 529

Scale 1:15840

Mapped by Dean Farr 09/14/07



PRE-SALE NARRATIVE  
C209H  
Middle Gresham Lake Area – Town of Boulder Junction

General Sale Description (including management goals and objectives): This proposed timber sale is located in the Town of Boulder Junction, near Middle Gresham Lake. This sale is located in the Vilas Sandy Plains North Forest Production Area (FPA #3). The management goal for the FPA is to provide for the sustainable production of timber and other forest products, and where appropriate long term visual appeal and ecological attributes that are characteristic of older forests. This sale covers three stands. Stand 4 is overmature aspen and northern pin oak. Stand 14 is north of Middle Gresham Lake, surrounding a stand of 36 year old aspen, and is also a lakeshore strip along Middle and Lower Gresham Lakes. It consists of overmature northern pin oak, aspen and white birch. The third stand is large sawlog red and white pines, with a large component of overmature aspen. Land type association falls in 212Jm03. The habitat type is PARV (Pinus-Acer rubrum/Vaccinium). Topography is level. The soils in the sale area are sand, thus precluding a biomass harvest.

Ecological Considerations: Stands 4 and 14 will harvest the overmature aspen and white birch, and the poorest quality pin oak, leaving the healthiest pin oak as residual trees. Scattered large sawlog pine will remain as well. This harvest will also release the understory white pine seedlings. The sawlog red and white pine stand is on an isthmus that extends into Middle Gresham Lake, which will be accessed by freezing down an ice road through a black spruce bog. The overmature aspen and white birch will be removed and the pine selectively thinned. The Natural Heritage Inventory was consulted and the only hit was for the Gray wolf. This sale falls within its pack territory and should have no impact upon the wolf. No known denning or rendezvous sites exist within the proposed sale area.

Water Quality Considerations: Best Management Practices (BMP's) for Water Quality will be incorporated into this timber sale. The residual basal area between 50 feet and 100 feet from the OHWM of Middle and Lower Gresham lakes will be maintained at greater than 60 square feet per acre, with an emphasis on maintaining longer lived tree species, i.e. red and white pine.

Aesthetic Considerations: Slash within 50 feet of the Town Roads, will be treated to lie within 2 feet of the ground. On the north side of the isthmus, a strip of trees will be left uncut to buffer the timber sale from the private dwellings on the north shore of the lake.

Wildlife Considerations: This area is used by game and non-game, birds, amphibians and mammals. This harvest will result in opening up the understory in the oak and pine stands, diversifying the flora and increasing the vertical structure. This will maintain a diversity of habitat conditions to support harvestable populations of the major forest game species. And, it will increase the habitat used by non-game species. In addition, as trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

Recreation Consideration: Uses of this area include hunting, trapping, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development.

Resources of Special Concern Considerations (archeological/historical review required on Department lands): The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale.

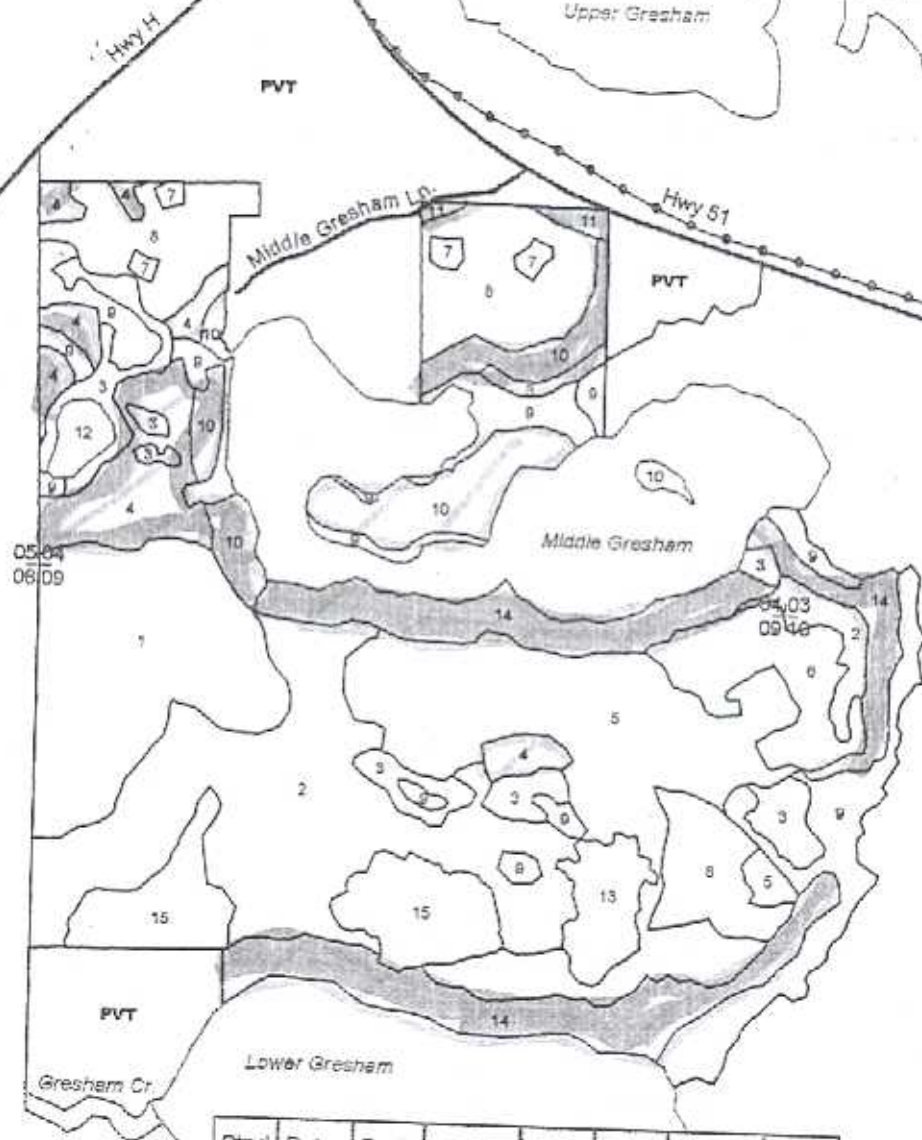
Todd Anderson 2010



# COMPARTMENT 209

T41N R06E Sec. 03, 04, 09, 10  
Northern Highland State Forest | Compartment Acreage = 546  
Vilas County Scale 1:15840  
Mapped by Dean Farr 02/17/04

Upper Gresham



Stnd	P_typ	P_siz	P_dens	S_typ	S_siz	S_dens	Acres
1	A	0105	3	PJ	0105	2	54
2	A	0105	3				88
3	SX	0105	1				25
4	OX	0511	3	BW	0511	1	30
5	A	0105	3	OX	0105	2	77
6	PR	0105	3				33
7	G						4
8	A	0105	3				39
9	K						51
10	OX	0511	3	A	0511	2	34
11	PJ	0509	2	A	0511	1	6
12	LM						4
13	PR	0105	3				11
14	OX	0511	2	PW	0105	2	61
15	PJ	0105	3				29

Major Roads  
Trails  
Open Water  
Private Land  
Aesthetic Areas  
Compartment 209



PRE-SALE NARRATIVE  
C226H  
Papoose Boat Landing – Town of Presque Isle

General Sale Description: This proposed timber sale is located on the south shore of Papoose Lake, in the Town of Presque Isle. It is within the Wineger Moraines Forest Production Area (FPA #1). The objective of this sale is to remove the overmature white birch, and increase the northern hardwood component of this stand. Land type association is 212Jc05. Habitat type is PArVAa. The soils are well drained sandy loam, and are suitable for biomass harvesting. The topography is level.

Ecological Consideration: There are two stands of timber between Papoose Lake and Papoose Landing Road. The white birch/northern hardwood stand nearest the lake will be harvested at this time. There is a stand of aspen along the town road that will be harvested in approximately 10 years in order to allow the stand along the lake to develop further into a northern hardwood stand. The white birch is mature, and some will be retained near the boat landing and along the lakeshore for aesthetics. Its removal will open up the stand to more sunlight and release the understory sugar maple. Some very mature aspen along the boat landing road will be removed for safety purposes. The Natural Heritage Inventory was consulted and the only hit was for the Gray wolf. This sale falls within its pack territory and should have no impact upon the wolf. No known denning or rendezvous sites exist within the proposed sale area.

Water Quality Considerations: Best Management Practices (BMP's) for Water Quality will be incorporated into this timber sale. The residual basal area between 50 feet and 100 feet from the OHWM will be maintained at greater than 60 square feet per acre, with an emphasis on maintaining longer lived tree species, i.e. red oak and sugar maple.

Aesthetic Considerations: Longer lived sugar maple, basswood, as well as red oak will be retained. Numerous white birches visible from the lake will be green marked for retention. Slash will be kept away from the boat landing and access road.

Wildlife Considerations: Cavity trees exist throughout the sale area, which are used by animals for nesting and denning. These trees will contribute to the coarse woody debris accumulation on the forest floor over time. This area is used by game and non-game, birds, amphibians and mammals. This sale will maintain a diversity of habitat conditions to support harvestable populations of the major forest game species. And, it will increase the habitat used by non-game species. In addition, as reserve trees die they will form denning trees and ultimately coarse woody debris, benefiting a wide range of animals.

Recreation Considerations: Uses of this area include hunting, wildlife viewing and hiking. The impact on hunting and wildlife viewing will be to diversify the habitat over time due to understory development.

Resources of Special Concern Consideration – Archeological/Historical Review: The archeological and historical site maps were reviewed and no sites were listed on the maps for this proposed timber sale.

Todd Anderson 2010



Compartment No. 226

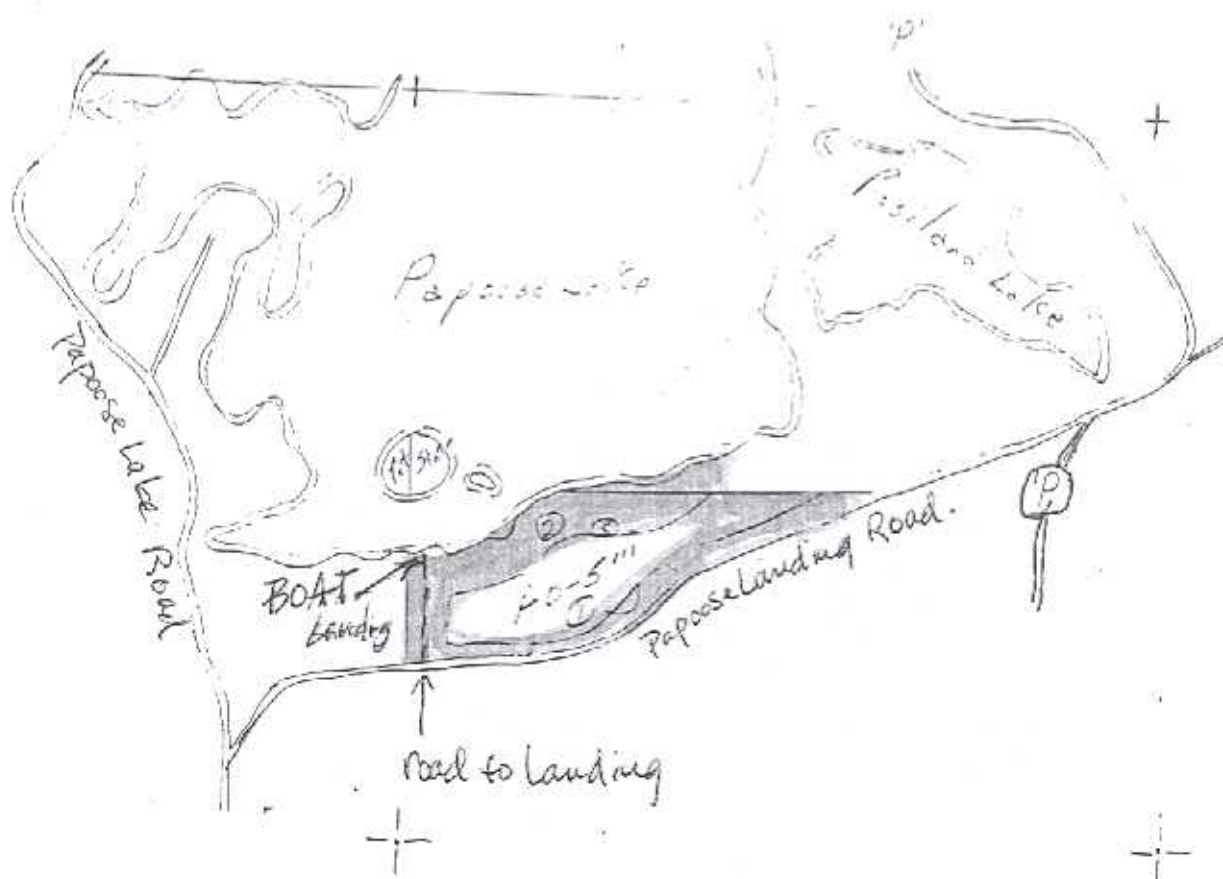
T 43 N R 6 E Sec. 25  
30

Co. Vilas Fl. No 21 Photo No. MPE 642

Mapped by J. Henke Date 2-14-63

W. Henke

Scale 1:16,000



Northern Highland American Legion State Forest – Gresham Road- 55 Acres  
Compartment 190 (T 41N-R6E Sec's. 15 & 16)  
Land Management Area = Vilas Sandy Plains North - Forest Production Area # 3  
Aspen/Pine Area ~ 45 acres  
Oak Shelterwood Removal Area ~ 10 acres

#### STAND DESCRIPTION

The general sale area is located north of the Trout River and south of Gresham Road, in the Town of Arbor Vitae, Vilas County. The general forest cover type in this area of the Northern Highland S.F. is dominated by extensive stands of aspen, oak, jack pine, and red pine plantations. This proposed timber sale includes the regeneration of oak and aspen stands and an improvement thinning in red and white pine stands. Stands 12, 13, & 16 of compartment 190 are in need of treatment at this time.

#### GOALS

The proposed sale area lies within Forest Production Area # 3, Vilas Sandy Plains North. The Northern Highland – American Legion State Forest Master Plan directs both the short and long term objectives of maintaining aspen as a strong component and maintaining current levels of red oak through harvest and site disturbance. It further states a long term objective of increasing red and white pine as a greater component within existing stands. Soils are primarily Croswell and Rubicon sand, on moderately steep, excessively drained soil on side slopes with habitat types ranging from PArV-AVVb.

#### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

The red pine plantation will receive an improvement thinning to promote large healthy trees that are adequately spaced for bole and crown development. This improvement thinning will also promote and increase the shrub layer as additional sunlight reaches the forest floor. Mature and decadent roadside aspen and white birch strips will be harvested to regenerate the aspen and associated species. Oak stands will receive a shelterwood harvest treatment to help promote and encourage natural regeneration of red oak. As opportunities arise natural white pine regeneration will be released and encouraged through ground disturbance for natural seeding.

#### WATER QUALITY

The proposed timber sale is entirely on upland sandy soils. Trout River lies adjacent to the proposed sale area. This river will be protected with a 50 foot buffer and residual basal areas will be greater than 60 sq. ft. within 100 feet of the river. The main objective adjacent to the river will be to promote longer lived species, such as red pine, white pine and oak, when possible.

#### AESTHETICS

This area is somewhat secluded except for travel to a local resort. Residual, "green retention" trees will help to mitigate the visual impact on the landscape. The retention of large red and white pine will aid in aesthetic management along Trout River.

#### WILDLIFE

This increased amount of sunlight, following the thinning, will provide additional cover and browse for a variety of game and non-game, birds and animals within the red pine plantation. Snag and den trees will be retained during marking operations. The retention of large diameter oak will provide mast and future den and cavity trees throughout the proposed sale area.

#### ENDANGERED RESOURCES

A check of the NHI portal site revealed hits for gray wolf, bald eagle, and osprey within 1 mile of the proposed sale. No known den or nesting sites for these species were identified after consultation with the Wildlife Biologist. Archeological reviews revealed no conflicts with the proposed forest management treatments prescribed.

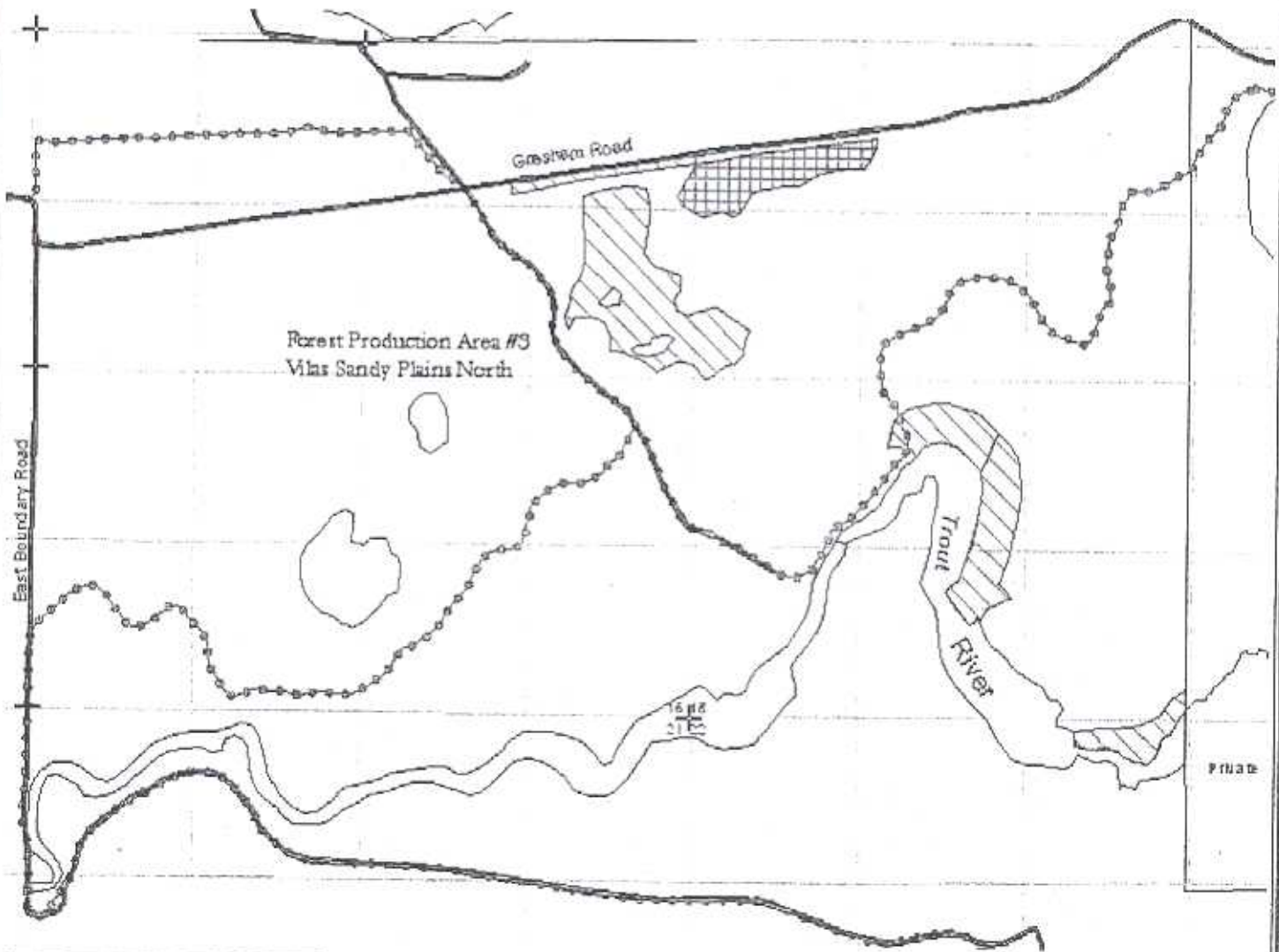
#### RECREATION

Hunting and snowmobiling are the primary recreational activities within the proposed sale area and harvesting activities should not impact either. Hunting opportunities should improve as aspen and oak regenerate creating browse and cover. Snowmobile trails will be signed appropriately if winter logging takes place.

Jim Wetherau 2010



WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
TIMBER SALE  
GRESHAM ROAD (C190)  
T41N R6E SECTIONS 15 & 16  
HARVEST ACRES - 55



Legend

- + Section Corners
- ~ Snowmobile Trails
- Highways and Town Roads
- ▨ Oak Area
- ▩ Aspen/Pine Area
- Lakes

▨ Oak Area (10 Acres): Cut overstory oak if adequate oak regeneration is present in the understory.

▩ Aspen/Pine Area (45 Acres): Cut mature aspen, white birch, jack pine, maple, and marked trees to improve the overall health and growing conditions for the red and white pine.

N  
Scale: 1" = 1 Mile  
1:12,500



Northern Highland American Legion State Forest – Witches Lake Oak  
Compartments 101,102,103 (T 40N-R7E Sec's. 2, 3, 10, 11 & T41N-R7E Sec's. 34, 35)  
Land Management Area = Vilas Sandy Plains Central - Forest Production Area # 4  
Oak regeneration, red & white pine improvement thinning ~ 422 acres

### STAND DESCRIPTION

The general sale area is located around Witches Lake, in the surrounding Townships of Plum Lake, Arbor Vitae, and St. Germain in Vilas County. There are some scattered private parcels within the proposed sale area. The general forest cover type in this area of the Northern Highland S.F. is dominated by extensive stands of aspen, oak, and pine. This proposed timber sale includes the management and regeneration of 353 acres of primarily red oak through a shelterwood harvest and an improvement thinning within 69 acres of pine and oak mixed with mature aspen, white birch, and red maple. A majority of the mature aspen, white birch, balsam fir, and red maple will be harvested within the sale area. The following compartments and stands will be treated at this time: Compartment 101 (Stands 2 & 10) Compartment 102 (Stands 1,5,6,7,10,11,13,15,16,17,19,20, & 21) Compartment 103 (Stand 2). Note that many of these stands will be combined following the harvest since they are similar in species composition and age structure.

### GOALS

The proposed sale area lies within Forest Production Area # 4, Vilas Sandy Plains Central. The Northern Highland – American Legion State Forest Master Plan directs both the short and long term objectives of maintaining oak as a strong component in mixed stands across the landscape. It further states a long term objective of increasing red and white pine as a greater component within existing stands. Soils are primarily Pence sandy loam and Rubicon sand, on moderately steep, excessively drained soil on side slopes with habitat types ranging from PARV-AVVb.

### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

Red & white pine stands will be marked for an improvement thinning in which mature aspen, white birch, jack pine, and red maple pine will be harvested along with orange marked red and white pine. Oak will receive a shelterwood harvest treatment to help maintain and perpetuate the oak type on the landscape. During sale establishment opportunities will be explored to release and establish white pine on the landscape through scarification and natural seeding especially along Witches Lake and near the private residences. White pine is a long-term objective for this area of the State Forest, as is directed in the master plan.

### WATER QUALITY

Witches Lake lies within the proposed timber sale on three sides. No harvesting will take place within 50 feet of the lake to protect the riparian management zone (RMZ). Any harvesting within 100 feet of the lake will ensure a residual basal area not less than 60 square feet/acre. Longer lived tree species, such as red pine, white pine, and oak, will be the primary management objective for this area for long term water quality and aesthetic management.

### AESTHETICS

Aesthetics are a concern due to the proximity of Witches Lake and the roadside strips along the town roads. Slash restrictions and vegetative screens will be incorporated into sale design to help mitigate the visual impact of harvesting operations. Certain aspen will be green marked "to leave" to discourage sprouting and maintain aesthetics within the lakeshore view and near private residences. The improvement thinning along Ross Lake Road and Witches Lake Road will provide for the long-term aesthetics as healthy larger diameter trees are maintained and opportunities are created for releasing white pine seedlings and regenerating a mix of aspen and oak.

### WILDLIFE

This area is used by game and non-game, birds and animals. The oak harvest will ensure future habitat for game and non-game species. Den and cavity trees will provide habitat for various birds and mammals while pine snags near Witches Lake will provide habitat for raptors. Future coarse woody debris will become available for small animals and amphibians when the snags deteriorate and fall down.

### ENDANGERED RESOURCES

A check of the NHI portal site revealed a hit for gray wolf. The Wildlife Biologist was consulted and it was determined that the proposed sale would not impact this resource since there are no known den or rendezvous sites in the proposed sale area. There are no known archaeological sites within the proposed sale area.

### RECREATION

Recreational considerations include boating, fishing, and hunting in the immediate sale area. Seasonal cutting restrictions might be incorporated in the harvesting blocks near Witches Lake to ensure the intrinsic values of those recreational activities on Witches Lake. Hunting opportunities in the area should remain about the same or increase as oak is regenerated on the landscape. There are handicapped hunter hiking trails which will be opened up during harvesting operations which will allow hunters better access into this block of the forest.

Jim Wetterau 2010

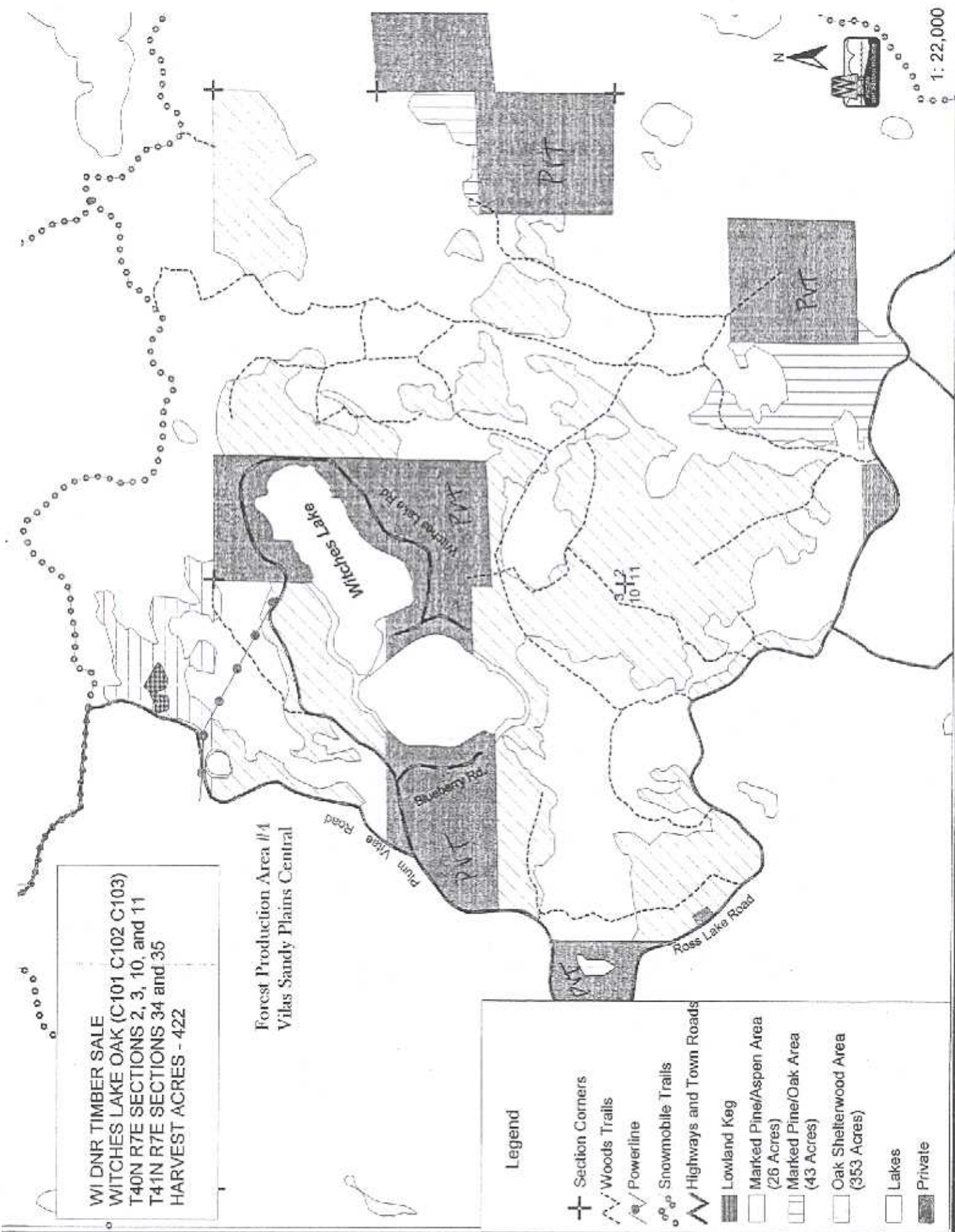


WI DNR TIMBER SALE  
 WITCHES LAKE OAK (C101 C102 C103)  
 T40N R7E SECTIONS 2, 3, 10, and 11  
 T41N R7E SECTIONS 34 and 35  
 HARVEST ACRES - 422

Forest Production Area #4  
 Vilas Sandy Plains Central

# Legend

- + Section Corners
- W Woods Trails
- Powerline
- Snowmobile Trails
- Highways and Town Roads
- Lowland Keg
- Marked Pine/Aspen Area (26 Acres)
- Marked Pine/Oak Area (43 Acres)
- Oak Shelterwood Area (353 Acres)
- Lakes
- Private



Northern Highland American Legion State Forest – Evergreen Lane- 168 Acres  
Compartments 174 & 175 (T 42N-R6E Sec's. 2 & 11)  
Land Management Area = Vilas Sandy Plains North - Forest Production Area # 3  
Red pine Improvement Thinning ~ 38 acres  
Aspen Regeneration Harvest ~ 33 acres  
Oak Shelterwood Area ~ 97 acres

#### STAND DESCRIPTION

The general sale area is located southwest of Little Crooked Lake, between Bear Lake Road and Evergreen Lane, in the Town of Boulder Junction, Vilas County. The general forest cover type in this area of the Northern Highland S.F. is dominated by extensive stands of aspen, oak, jack pine, and red pine plantations. This proposed timber sale includes the improvement thinning of an overstocked red pine plantation, a regeneration harvest of mature aspen stands, and a shelterwood harvest in oak stands to naturally regenerate oak. The following compartments and stands will be treated at this time: Compartment 174 (Stand 6) Compartment 175 (Stands 1, 4, 5, 8, & 10). Note that some of these stands will be combined following the harvest since they are similar in species composition and age structure.

#### GOALS

The proposed sale area lies within Forest Production Area # 3, Vilas Sandy Plains North. The Northern Highland – American Legion State Forest Master Plan directs both the short and long term objectives of maintaining aspen as a strong component and maintaining current levels of red oak through harvest and site disturbance. It further states a long term objective of increasing red and white pine as a greater component within existing stands. Soils are primarily Keweenaw sandy loam and Karlin loamy fine sand on gently sloping, somewhat excessively drained soils with habitat types ranging from PARV – AVVb.

#### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

The red pine plantation will receive an improvement thinning to promote large healthy trees that are adequately spaced for bole and crown development. This improvement thinning will also promote and increase the shrub layer as additional sunlight reaches the forest floor. Mature and decadent roadside aspen and white birch strips will be harvested to regenerate the aspen and associated species. Oak stands will receive a shelterwood harvest treatment to help promote and encourage natural regeneration of red oak. As opportunities arise natural white pine regeneration will be released and encouraged through ground disturbance for natural seeding.

#### WATER QUALITY

The proposed timber sale is entirely on upland sandy soils. Little Crooked lake lies northeast of the proposed sale area. This lake will be protected with a 50 foot buffer and residual basal areas will be greater than 60 sq. ft. within 100 feet of the lake.

#### AESTHETICS

There are several private parcels and town roads adjacent to the proposed sale area. A small percentage of the actual cutting will be visible from the town roads. The depth of the aspen harvest will be small in scope and the residual red pine stand will help to lessen the visual impact on the landscape. This harvest will also create a new size and age class in the aspen which will provide a screen for future harvests.

#### WILDLIFE

This increased amount of sunlight, following the thinning, will provide additional cover and browse for a variety of game and non-game, birds and animals within the red pine plantation. Snag and den trees will be retained during marking operations. The retention of large diameter oak will provide mast and future den and cavity trees throughout the proposed sale area.

#### ENDANGERED RESOURCES

A check of the NHI portal site revealed hits for gray wolf, bald eagle, and osprey within 1 mile of the proposed sale. No known den or nesting sites for these species were identified after consultation with the Wildlife Biologist. Archeological reviews revealed no conflicts with the proposed forest management treatments prescribed.

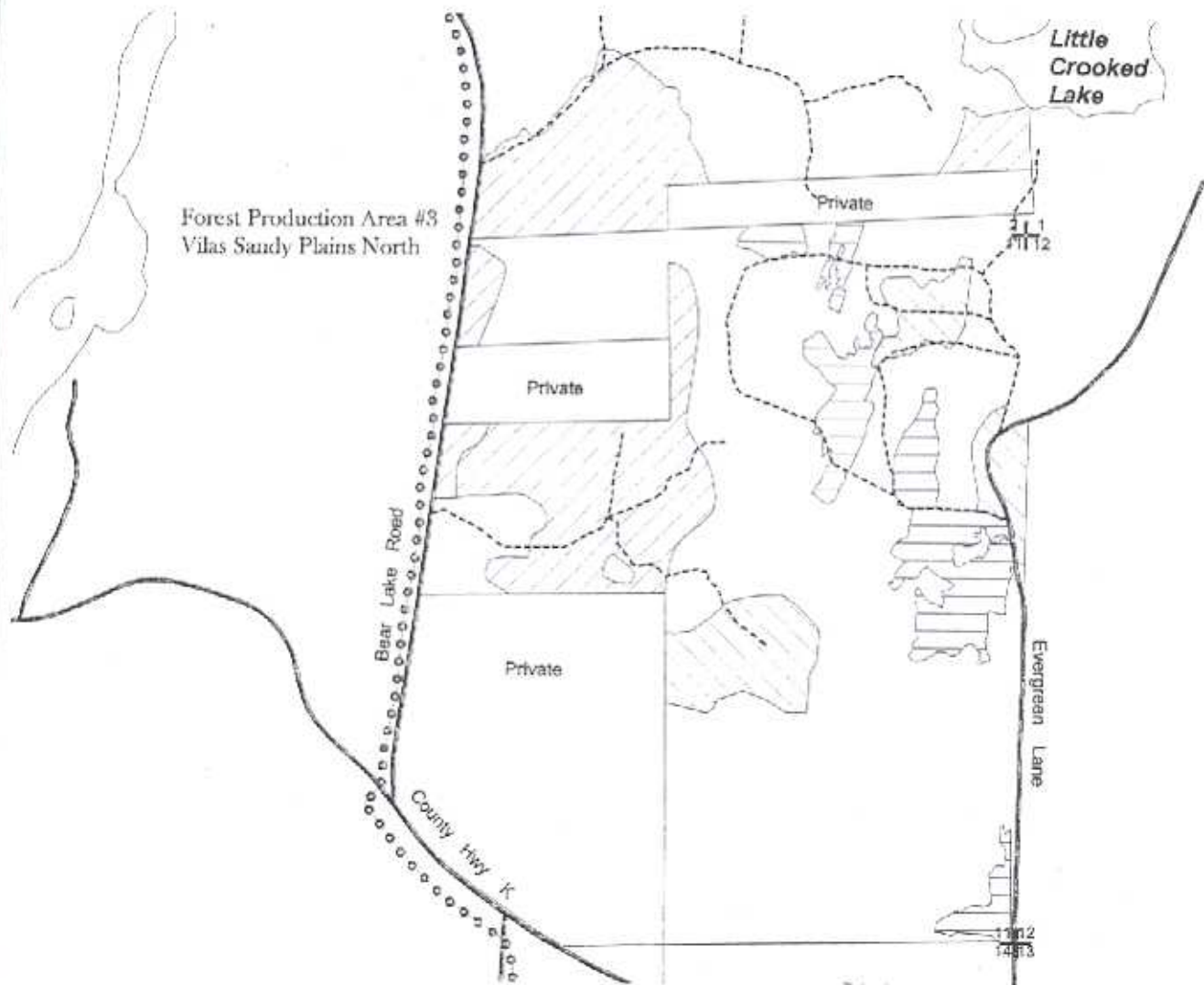
#### RECREATION

Hunting and snowmobiling are the primary recreational activities within the proposed sale area and harvesting activities should not impact either. Hunting opportunities should improve as aspen and oak regenerate creating browse and cover.

Jim Wetheran 2010



WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
TIMBER SALE  
EVERGREEN LANE (C174 C175)  
T42N R6E SECTIONS 2 & 11  
HARVEST ACRES - 168



**Legend**

- Section Corner
- Highways and Town Roads
- Woodtrails.shp
- Snowmobile Trail
- Aspen Regeneration Area
- Oak Shelterwood Area
- Red Pine Thinning Area
- Lakes

- Oak Shelterwood Area (97 Acres): Cut approximately 50-60% of the crown canopy to regenerate red oak as the desired species.
- Red Pine Plantation (38 Acres): Cut all orange marked pine to improve growth rates and maintain stand health and vigor.
- Aspen Area (33 Acres): Cut all aspen, white birch, soft maple, and jack pine to regenerate species.

N  
Scale: 4" = 1 Mile  
1:15,840  
  
Map produced by  
Jim Vetterli, 2/10

Northern Highland American Legion State Forest – Day Lake South  
Compartments 170, 171, 180, & 181 (T 41N-R6E Sec's. 1, 2, 11, & 12 and T42N-R6E Sec's. 35, 36)  
Land Management Area = Vilas Sandy Plains North - Forest Production Area # 3  
Oak regeneration, red & white pine improvement thinning ~ 349 acres

### STAND DESCRIPTION

The general sale area is located near Day Lake, in the Township of Boulder Junction in Vilas County. There is one private parcel within the proposed sale area. The general forest cover type in this area of the Northern Highland S.F. is dominated by extensive stands of aspen, oak, and pine. This proposed timber sale includes the management and regeneration of 110 acres of primarily red oak through a shelterwood harvest and an improvement thinning within 239 acres of pine and oak mixed with mature aspen, white birch, and red maple. A majority of the mature aspen, white birch, balsam fir, and red maple will be harvested within the sale area. The following compartments and stands will be treated at this time: Compartment 170 (Stands 1, 5, & 8) Compartment 171 (Stands 6&10) Compartment 180 (Stand 13) Compartment 181 (Stands 4, 5, 7, 8, and 9). Note that many of these stands are residual roadside strips which are declining in vigor and need to be treated at this time.

### GOALS

The proposed sale area lies within Forest Production Area # 3, Vilas Sandy Plains North. The Northern Highland – American Legion State Forest Master Plan directs both the short and long term objectives of maintaining aspen as a strong component and maintaining current levels of red oak through harvest and site disturbance. It further states a long term objective of increasing red and white pine as a greater component within existing stands. Soils are primarily Pence sandy loam on sloping and moderately steep, well drained soil with habitat types ranging from PArV-AVb.

### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

Red & white pine stands will be marked for an improvement thinning in which mature aspen, white birch, jack pine, and red maple pine will be harvested along with orange marked red and white pine. Oak will receive a shelterwood harvest treatment to help maintain and perpetuate the oak type on the landscape. Areas dominated by aspen will also be regenerated and maintained on the landscape as a short term objective. During sale establishment opportunities will be explored to release and establish white pine on the landscape through scarification and natural seeding especially along well travelled Hwy 51 and near Day Lake Road. White pine is a long-term objective for this area of the State Forest, as is directed in the master plan.

### WATER QUALITY

Day Lake lies outside the proposed timber sale and is classified as a Native Community Area #13. No harvesting will take place within the riparian management zone (RMZ). Any adjacent lowland areas will be maintained in their current condition. The majority of the sale area is on high sandy soils.

### AESTHETICS

Aesthetics are a concern along Hwy 51 and Day Lake Road. The improvement thinning in both the pine and oak along these travel routes will provide for the long-term aesthetics as healthy larger diameter trees are maintained and opportunities are created for releasing white pine seedlings and regenerating a mix of aspen and oak. The visual impact of harvesting operations along Hwy 51 will be mitigated by adjacent stands and residual trees.

### WILDLIFE

This area is used by game and non-game, birds and animals. The oak harvest will ensure future habitat for game and non-game species. Den, cavity, and snag trees will provide habitat for various birds and mammals. Future coarse woody debris will become available for small animals and amphibians when the snags deteriorate and fall down.

### ENDANGERED RESOURCES

A check of the NHI portal site revealed a hit for gray wolf and eagle. The Wildlife Biologist was consulted and it was determined that the proposed sale would not impact this resource since there are no known den or rendezvous sites in the proposed sale area or raptor nests. There are no known archaeological sites within the proposed sale area.

### RECREATION

Recreational considerations include snowmobiling, boating, fishing, and hunting in and around Day Lake. These recreational activities should not be impacted by harvesting activities. Hunting opportunities in the area should remain about the same or increase as oak is regenerated on the landscape.

Jim Wetterau 2010



WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
TIMBER SALE  
DAY LAKE SALE (C170, C171, C180, C181)  
T41N R6E SECTIONS 1, 2, 11, & 12  
T42N R6E SECTIONS 35 & 36  
HARVEST ACRES - 349

Pine Thinning Area (239 Acres): Harvest all merchantable aspen, white birch, maple, jack pine, and orange marked trees to improve growth rates of crop trees and maintain stand health and vigor.

Oak Shelterwood Area (110 Acres): Cut approximately 50-80% of the crown canopy to regenerate red oak as the desired species.

Forest Production Area #3  
Vilas Sandy Plains North

Day Lake

Forest Production Area #3  
Vilas Sandy Plains North

Day Lake Road

Private

Legend

- + Section Corner
- W Woods Trails
- o o o o Snowmobile Trail
- W Highways and Town Roads
- Lowland Area
- Oak Shelterwood Area
- Pine Thinning Area
- Lakes

1:25000



Map produced by  
Jim Vetter, 2010

**Tract Number:** xx-xx

**Sale Name:** Compartment 96

**Legal Description:** Vilas County – T42N-R7E Sections 25 & 26

**Timber Types include:** Red Oak, Red & White Pine

**Total Acreage =** 70 acres more or less

**STAND DESCRIPTION:** This compartment is located within the Town of Boulder Junction. It is situated between White Sand Lake to the west, Nixon Lake road to the east, and County Highway K to the south. County Highway K is designated as a "Rustic Road" and is primarily managed to "protect and enhance the scenic beauty" of the road corridor. The Lumberjack hiking and biking recreational trail bisects a portion of this compartment however only a small portion is located within any of the stands scheduled for management. In addition, two canoe campsites are located along the lakeshore as well as a popular local swimming area occur within this compartment. The stands scheduled for management at this time include stands 1, 5, 10 and 11. Stands 1, 10, and 11 are a mixture of both white and red pine sawtimber scheduled for an improvement thinning. Stand 5 is a red oak stand scheduled for an overstory removal harvest which is currently overtopping a dense understory of advanced white pine regeneration. Forest management last occurred within this compartment approximately 18 years ago when the pines stands were thinned and a shelterwood harvest occurred within the oak stand.

**GOALS:** This compartment is primarily classified within the NHAL Master Plan as a Forest Production Area and is located within the Vilas Sandy Plains North management zone (Area 3). However a scenic management corridor exists adjacent to County Highway K for a distance of 233 feet (Area 16: Scenic Resource Management Area). The management goals for the area are to provide timber and other forest products on a sustainable basis within forest production areas and maintain and protect the scenic beauty along the "Rustic Road". Specific management objectives include increasing red and white pine as a forest community type, maintaining early successional species such as aspen and jack pine in mixed stands and leaving healthy pine within. Within the scenic management corridor, standard forest management prescriptions will be modified to minimize visual impacts from the road. In addition, in areas dominated by short-lived species such as aspen and white birch, forest management will emphasize conversion to longer-lived species that includes both pine and oak.

**ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION:** The pine stands being managed are located on a PARV and PARVAa habitat types that are common to well-drained sandy loam soils. In general these habitat types tend to be nutrient poor, but are well suited for management of red and white pine. The red and white pine stands (stands 1, 10, & 11) will be selectively thinned in which a residual basal area of 120-140 sq. ft. will be maintained of the best quality trees. The objectives for this improvement harvest are to maintain stand health and vigor and increase growth rates of the best quality trees. A small portion of Stand 10 that borders County Hwy K will remove only the highest risk trees within a distance of 233 ft from the center of the road. This is in accordance with guidelines identified within the NHAL Master plan. An overstory removal will be conducted with Stand 5 where a dense understory of advanced white regeneration exists. Removal of the existing oak overstory will release the white pine seedlings from their shade resulting in a "free to grow" condition for the seedlings. Scattered red oak along with small groups will remain after the harvest meeting green tree retention requirements for the site.

**WATER QUALITY, BMPS:** The lakeshore along White Sand Lake will be protected with a riparian no-cut buffer strip of a minimum of 50 feet. Between 50 and 100 feet from the lakes high water-mark, a "light thinning" will occur which retains large, long lived species if present. If only short-lived species such as aspen and white birch exist, these species shall be retained in place of the longer-lived species in this zone. Machinery will be prohibited from working within 100 feet of the lakeshore. Rutting and soil disturbance will be minimal because of the soil types present (SaD – Sayner-Rubicon sandy loam complex and Rob – Rubicon Sands). No new roads will be built. All old roads and existing landing sites will be reused.

Paul Stearns 2010



**AESTHETICS:** The riparian management zones established along the lakeshore will minimize any visual impacts that may occur. County Highway K is designated as a "Rustic Road" so aesthetics along this small portion of the proposed sale area is critical. Within the aesthetic zone only "high-risk" pine and oak will be designated for harvest. In addition small groups of white birch and aspen may also be retained where no longer-lived species occur to further mitigate any visual impact. All logging slash will be pulled back into the stand and away from the road for a distance of 50 feet. Selective thinning of pine will be "light" adjacent to the Lumberjack hiking/biking trail

**WILDLIFE:** Conifers will offer thermal protection while retention of oaks will continue to provide mast for wildlife well into the future. The logging debris will provide temporary habitat and cover for small mammals and amphibians. Den cavity trees will be identified and left during marking operations.

**ENDANGERED RESOURCES:** The NHI (Natural Heritage Inventory) database identified two plants of special concern and one mammal. These include Northeastern Bladderwort, Vasey's Pondweed, and Gray Wolf. These plants of special concern will not be impacted because the management areas are outside their likely habitat areas. Any potential den and or rendezvous sites will be identified and reported to local wildlife specialist and sale modifications will be incorporated accordingly. In addition, a native community of special concern was identified (Northern sedge meadow), but this community will not be impacted by management because it too is outside the proposed sale area and primarily confined to wetland borders that surround Nixon Lake, Nixon Creek and Partridge Creek. A review of the archeological data for this area indicates that the portion along the lakeshore within the project area "is likely to contain archeological sites" of significance. Consultation with Department staff will occur and if sites of significance occur modifications to the sale will implemented.

**RECREATION:** This compartment and surrounding area is classified as a "Semi-remote Recreational Area" within the NHAL Master Plan. The primary objective for this area is to provide a somewhat remote, non-motorized recreational opportunity. All town roads and existing snowmobile trails will remain open however all temporary roads will be closed after forest management activities have been completed. White Sand Lake is a popular recreational lake on the Northern Highland State Forest and therefore aesthetics are a primary concern when conducting forest management activities. In addition numerous seasonal homes occur around the lake and as can be expected water sports such as boating, fishing and swimming are the primary recreational activities in the area. The Lumberjack hiking/biking trail bisects a small portion of a pine stand scheduled for selective thinning as well as two canoe campsites. When working in these areas the recreational specialist will be consulted for any modifications to the management objectives. In general, standard forest management practices will be altered along the lakeshore and recreational trails to accommodate both recreational and aesthetic concerns.

**AESTHETICS:** The riparian management zones established along the lakeshore will minimize any visual impacts that may occur. County Highway K is designated as a "Rustic Road" so aesthetics along this small portion of the proposed sale area is critical. Within the aesthetic zone only "high-risk" pine and oak will be designated for harvest. In addition small groups of white birch and aspen may also be retained where no longer-lived species occur to further mitigate any visual impact. All logging slash will be pulled back into the stand and away from the road for a distance of 50 feet. Selective thinning of pine will be "light" adjacent to the Lumberjack hiking/biking trail

**WILDLIFE:** Conifers will offer thermal protection while retention of oaks will continue to provide mast for wildlife well into the future. The logging debris will provide temporary habitat and cover for small mammals and amphibians. Den cavity trees will be identified and left during marking operations.

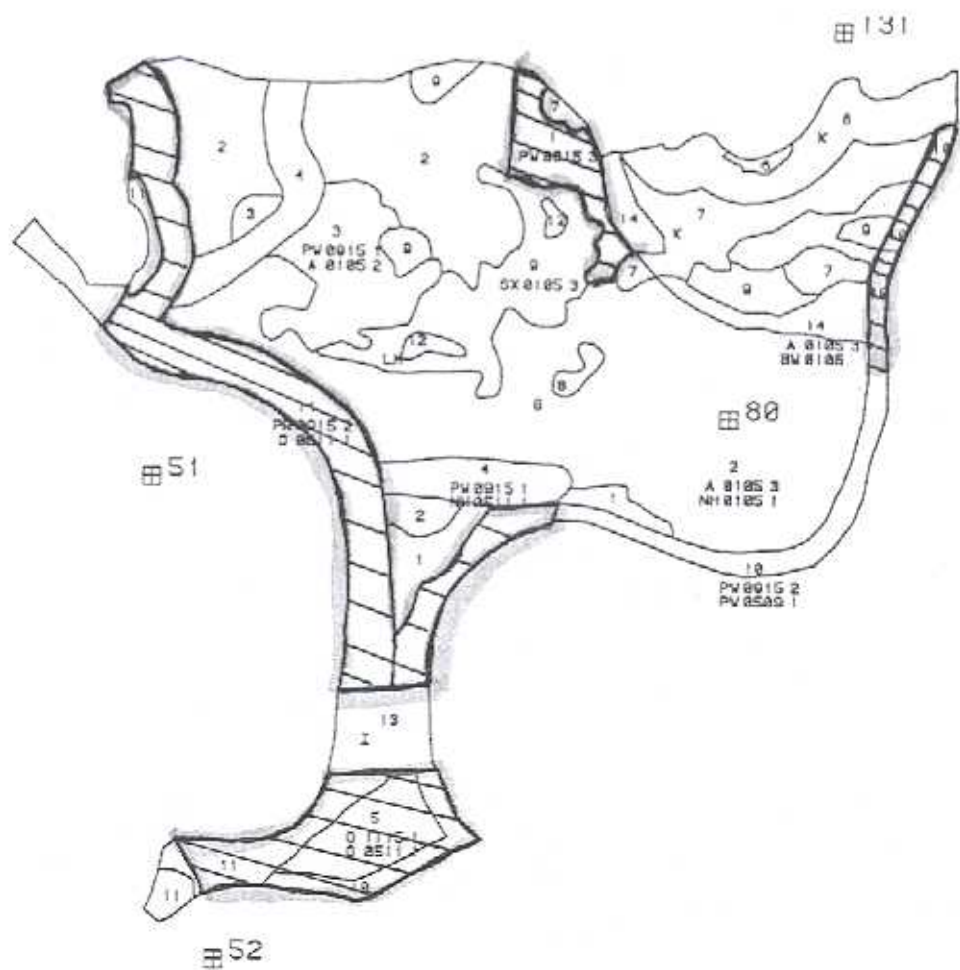
**ENDANGERED RESOURCES:** The NHI (Natural Heritage Inventory) database identified two plants of special concern and one mammal. These include Northeastern Bladderwort, Vasey's Pondweed, and Gray Wolf. These plants of special concern will not be impacted because the management areas are outside their likely habitat areas. Any potential den and or rendezvous sites will be identified and reported to local wildlife specialist and sale modifications will be incorporated accordingly. In addition, a native community of special concern was identified (Northern sedge meadow), but this community will not be impacted by management because it too is outside the proposed sale area and primarily confined to wetland borders that surround Nixon Lake, Nixon Creek and Partridge Creek. A review of the archeological data for this area indicates that the portion along the lakeshore within the project area "is likely to contain archeological sites" of significance. Consultation with Department staff will occur and if sites of significance occur modifications to the sale will be implemented.

**RECREATION:** This compartment and surrounding area is classified as a "Semi-remote Recreational Area" within the NHAL Master Plan. The primary objective for this area is to provide a somewhat remote, non-motorized recreational opportunity. All town roads and existing snowmobile trails will remain open however all temporary roads will be closed after forest management activities have been completed. White Sand Lake is a popular recreational lake on the Northern Highland State Forest and therefore aesthetics are a primary concern when conducting forest management activities. In addition numerous seasonal homes occur around the lake and as can be expected water sports such as boating, fishing and swimming are the primary recreational activities in the area. The Lumberjack hiking/biking trail bisects a small portion of a pine stand scheduled for selective thinning as well as two canoe campsites. When working in these areas the recreational specialist will be consulted for any modifications to the management objectives. In general, standard forest management practices will be altered along the lakeshore and recreational trails to accommodate both recreational and aesthetic concerns.



NORTHERN\_HIGHLAND

PAUL SCHULTZ .2/00



Tract Number: xx-xx  
Sale Name: Compartment 59  
Legal Description: Vilas County – T42N-R8E Sections 4, 5 & 8  
Timber Types include: Aspen  
Total Acreage = 250 acres more or less

**STAND DESCRIPTION:** This compartment is within the Town of Land O' Lakes and is located north and west of Johnson Lake and the Johnson Lake State Natural Area. The area is characterized by rolling, pitted outwash topography that is dominated by well-drained sandy soils. The stands scheduled for management include 2, 7, 10 & 15. These aspen stands are rapidly declining due to a host of agents including *Armillaria*, root disease, hypoxylon canker fungus, and insect infestation from the Bronze Poplar Borer. This was confirmed by a site visit by a DNR Forest Health Specialist in July of 2008. These agents that are killing the trees resulted from a variety of factors which preceded them and left the stands in a weakened condition. Average basal areas for these stands are significantly low and some declining with each year.

In 1968 a portion of these stands were treated with herbicide and various application rates were established in different areas. The result has been a "clean" understory comprised primarily of grasses and sedges and several larger pockets of un-forested areas dominated by grasses.

**GOALS:** These compartments are classified within the NHAL Master Plan as a Forest Production Area and are located within the Vilas Sandy Plains North management zone (Area 3). The primary management goals for this area are to provide timber and other forest products on a sustainable basis. Specifically the objectives for these stands are to maintain the present forest type (aspen) while promoting and enhancing a wide diversity of habitat conditions. This will be accomplished through the regeneration of the aspen stands and by converting a portion of these stands to red and jack pine through artificial regeneration (tree planting).

**ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION:** The aspen stands to be managed are located on a PARv, and PARVAa habitat types which are common to the well-drained, nutrient-poor, Sayner-Rubicon sandy loam soils. Both habitat types are well suited for management of aspen, pine and oak. The exception to this is a narrow ridge that bisects stands 2 & 15 which is comprised of a Pence sandy loam cap. The habitat type common to this soil type is normally an AVVb. Pence sandy loam soils are considered slightly more nutrient-rich and capable of supporting a greater variety of species including aspen. These aspen stands will be regenerated at this time utilizing a coppice with stands harvest that retains pine, oak and white spruce providing and meeting "green tree retention" requirements. Portions of these stands will be converted to pine that is either red or jack.

**WATER QUALITY, BMPS:** There is no open water in or directly adjacent to these stands. Rutting and soil disturbance will be minimal because of the soil types present (PnB, & SaC – Pence sandy loam and Sayner-Rubicon sandy loam complex). Old roads and landings will be reused.

**AESTHETICS:** Although this not considered a high use recreation area, both permanent and seasonal residents live along High Lake Road and do use the area for hiking, biking, berry picking and wildlife viewing. To mitigate any negative visual effects from the harvest, small groups or islands will be retained along both Jute Lake and High Lake roads. In addition, retention of scattered pine, oak and white spruce will further minimize visual impacts resulting from the harvest.



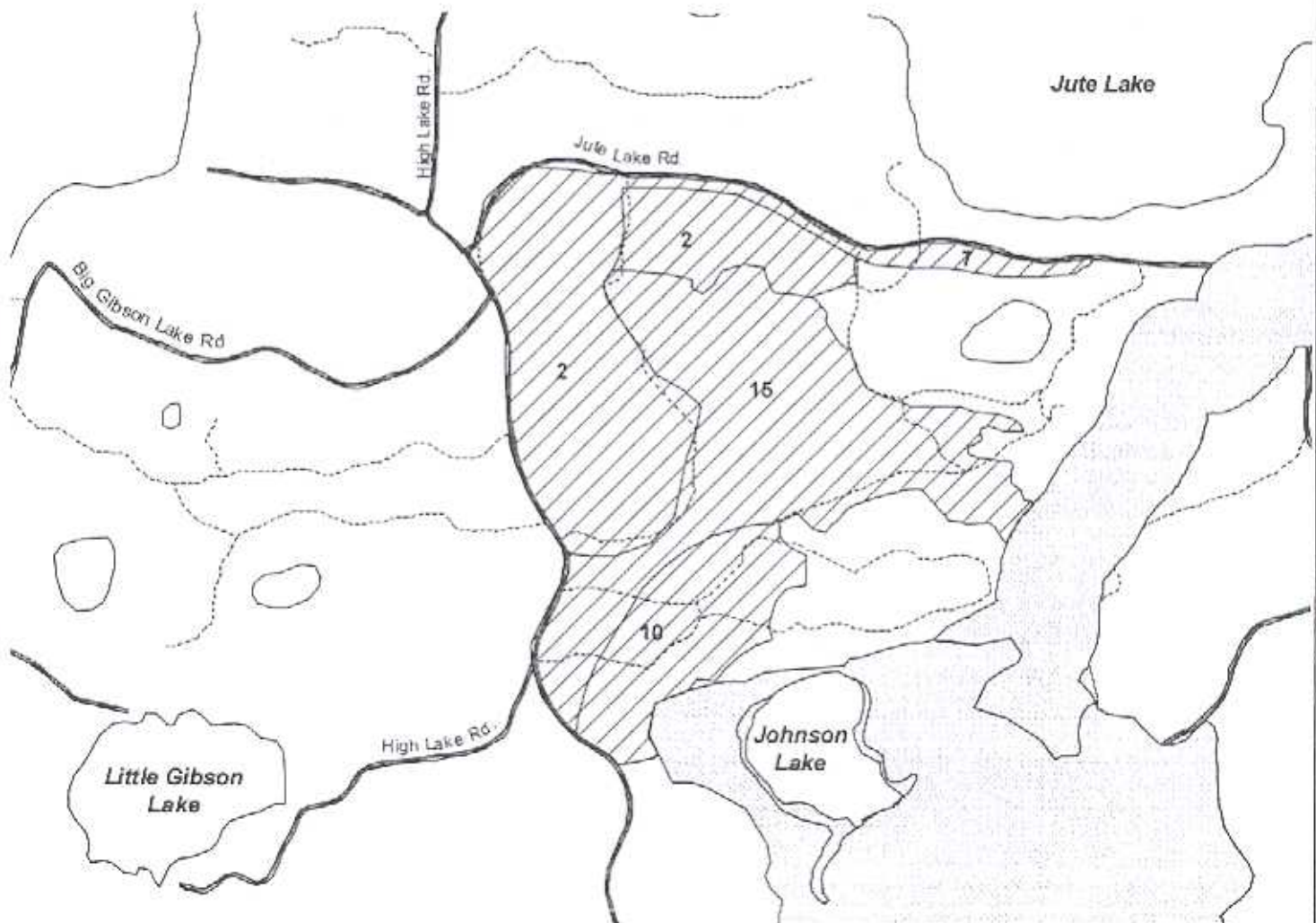
WILDLIFE: The regeneration of aspen and other early successional trees will be good for game species of wildlife and other animals and birds. Additional composition and structure will be created providing a diversity of food and shelter for wildlife. Den and cavity trees will be identified and retained in managed areas. Slash and other woody debris, following the harvest, will benefit certain mammals and amphibians. The retention of the pine, spruce and some balsam fir throughout the area will continue to provide needed thermal cover while the retention of oaks will continue to provide mast for wildlife well into the future. The logging debris will provide temporary habitat and cover for small mammals and amphibians.

ENDANGERED RESOURCES: A review of the Natural Heritage Inventory (NHI) database was conducted for the proposed sale area and no threatened, endangered or species of special concern were found to be on that list. At this time the forester is unaware of any adverse impacts timber management would have on any endangered resources. In addition, review of existing archeological data indicates this area is not likely to contain any sites of significance.

RECREATION: The existing network of woods roads provides access for many different recreational pursuits including hunting, biking, wild berry picking, hiking, snowshoeing and wildlife viewing. Timber management in this area will expand those recreational opportunities and further provide access throughout the compartment.

Paul Sfeavns 2010

WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
TIMBER SALE  
TRACT XX-XX JOHNSON LAKE ASPEN  
T42N R8E SECTIONS 4, 5, 8  
HARVEST ACRES - 250



**Legend**

- Lakes & Open Water
- Proposed Sale Area
- Johnson Lake State Natural Area
- Town & Local Roads
- Woods Roads



Scale: 4" = 1 Mile  
1:15,840



Map produced by  
Paul Stearns, DNR



Compartment 56      Stands 1, 3, 4, 5, 6, 8 & 16

Legal Description: Vilas County T41N R7E Sec 1 & T41N R8E Sec 5, 6, & 7

Timber types: White birch, aspen, and black spruce

Acres: ~ 400

See attached compartment map for stands scheduled for harvesting.

#### STAND DESCRIPTION

The potential sale area includes approximately 320 acres of decadent, wind thrown white birch and aspen with significant balsam fir; and 80 acres of black spruce. It is located in the Town of Plum Lake and bordered by Partridge Lake, Partridge Creek, McGinnis Creek, Alva Lake, as well as one private land owner to the south of the sale area along Partridge Lake. Previously designated as part of the Partridge-Nixon Lake Wild Area under the 1982 Northern Highland management plan, this area was redesignated in the current NHAL Master Plan, as a Semi-Remote Area within the Vilas Sandy Plains North Forest Production Management Classification.

Historic files indicate one harvest in compartment during 1976-1978. At that time several stands of aspen and white birch were regenerated.

#### OBJECTIVES

Some stands are designated under the Forest Production Management Classification 4 – Vilas Sandy Plains Central, the overall forest management objectives include:

- Increasing the presence and age of red and white pine on suitable sites to a dominant species;
- Maintain sites with early successional forest types such as aspen, jack pine, and white birch. Some white birch stands will be converted to pine plantations;
- Manage for current levels of red oak, assuring natural regeneration through harvest and site disturbance and increasing the average age of this type in mixed stands. Northern hardwood communities will decrease as a result of managing to favor red oak and pine;
- Maintain the forested and non-forested wetlands.

Other portions of the sale area are part of the Native Community Management Classification - Special Aquatic for Partridge Lake. The NHAL Master Plan designates the following long and short-term objectives:

- Improve the forest composition on upland sites by accelerating or enhancing the long-lived species component;
- The increase of longer lived species is part of maintaining BMPs for water quality and enhancing aesthetic values;
- Specific to the Partridge Lake site, apply appropriate forest management techniques to maintain upland forest types and to promote diversity in composition and age, especially for long-lived tree species.

The NHAL Master Plan designates Partridge Lake as a Scenic Lake; as a result, a 400 foot scenic management zone is required. Management within this zone includes the following objectives:

- Maintain and enhance the natural appearing and generally undeveloped landscape of each lake.
- Manage to favor a mixed composition of species with emphasis on larger, longer-lived trees.
- Maintain an abundant amount of snags and coarse woody debris.
- Retain all white cedar.
- Under plant with red or white pine, if necessary to speed the conversion to longer-lived species.
- Consider salvage when the visual qualities along the lake shore can be enhanced and erosion potential can be mitigated. Plant following salvage.
- When harvesting timber, modify the standard prescriptions to minimize the visibility of management activities as viewed from the water and access roads. Clear cutting is not authorized, except as necessary for salvage operations.

The NHAL Master Plan designates Lake Alva as a Wilderness Lake; as a result, a ¼ mile passive management zone is required. Management within this zone includes the following objectives:

- Maintain the lakes in an undeveloped condition and without significant signs of human influence for recreational, ecological, and habitat values.
- Passively manage, except to remove invasive species, forest restoration (including thinning pine plantations to restore them to a more natural appearing condition), maintain designated trails and primitive canoe campsites.
- Salvage activities following a natural disturbance are not allowed. However, planting native species of trees is allowed for restoration or scenic enhancement purposes.

#### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

- Upland soils including Keweenaw-Karlin complex, Padus-Pence complex, and Sayner-Rubicon complex, with habitat types of PARV, PARVVA, and AVVB, support early successional species including aspen, white birch, and balsam fir as well as longer lived species such as red oak and red and white pine.
- Silviculture management will involve salvaging aspen, white birch, and balsam fir which was scheduled for harvest in the mid '70s; and the put off until the early to mid '90s because of the Wild Area designation. Much of the merchantable timber is dead, blown down, or in a severe state of decline. Oak, red pine, and white pine will be retained as seed trees in order to promote timber type change to these longer lived species in the future. Some areas may be planted following harvest to facilitate forest restoration to longer-lived species such as red pine, white pine, and white spruce.
- The lowland soils classified as Loxley and Dawson peats, support productive and marginally productive stands of black spruce and tamarack.
- Productive stands of black spruce and tamarack will be regenerated using a series of strip cuts as per the WDNR Silviculture Handbook. Most often, harvesting in these strips takes place during frozen ground conditions to minimize hydrologic impacts.

#### WATER QUALITY, BMPS

By implementing WI BMP's, timber sale design will protect forested and non-forested wetlands included within the sale. Merchantable black spruce and tamarack stands will be harvested under frozen ground conditions or drought conditions allow to avoid impacts to the hydrology.

#### AESTHETICS

Aesthetics along Partridge Lake, Partridge Creek, and McGinnis Creek will be minimized by implementing WI BMP's. Several local citizens hike the ridges within the proposed timber sale area. It will be difficult to moderate aesthetics along much of the trail due to blow down and declining timber.

#### WILDLIFE

The first step of the shelterwood using single tree and group tree selection will increase vertical structure, providing increased habitat for many avian species. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds. Seed trees, mast trees, snag trees, and den trees will remain throughout the stand meeting Green Tree Retention Guidelines to provide habitat for cavity nesting species.

#### ENDANGERED RESOURCES

NHI Portal listed one threatened avian species, 2 avian species of special concern, and one mammalian species of special concern within the project area, as well as 2 avian species of special concern within one mile. The local Wildlife Biologist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological and historical records do not indicate any known sites in these stands.

#### RECREATION

Current uses in the area include hunting, water based recreation, wildlife viewing, hiking, and visual aesthetics. Forest management enhances habitat for many game and non-game species and silviculture practices implemented will minimize visual changes to the landscape.

KON 5/5/2010

Kelly Martinko 2010



田 124

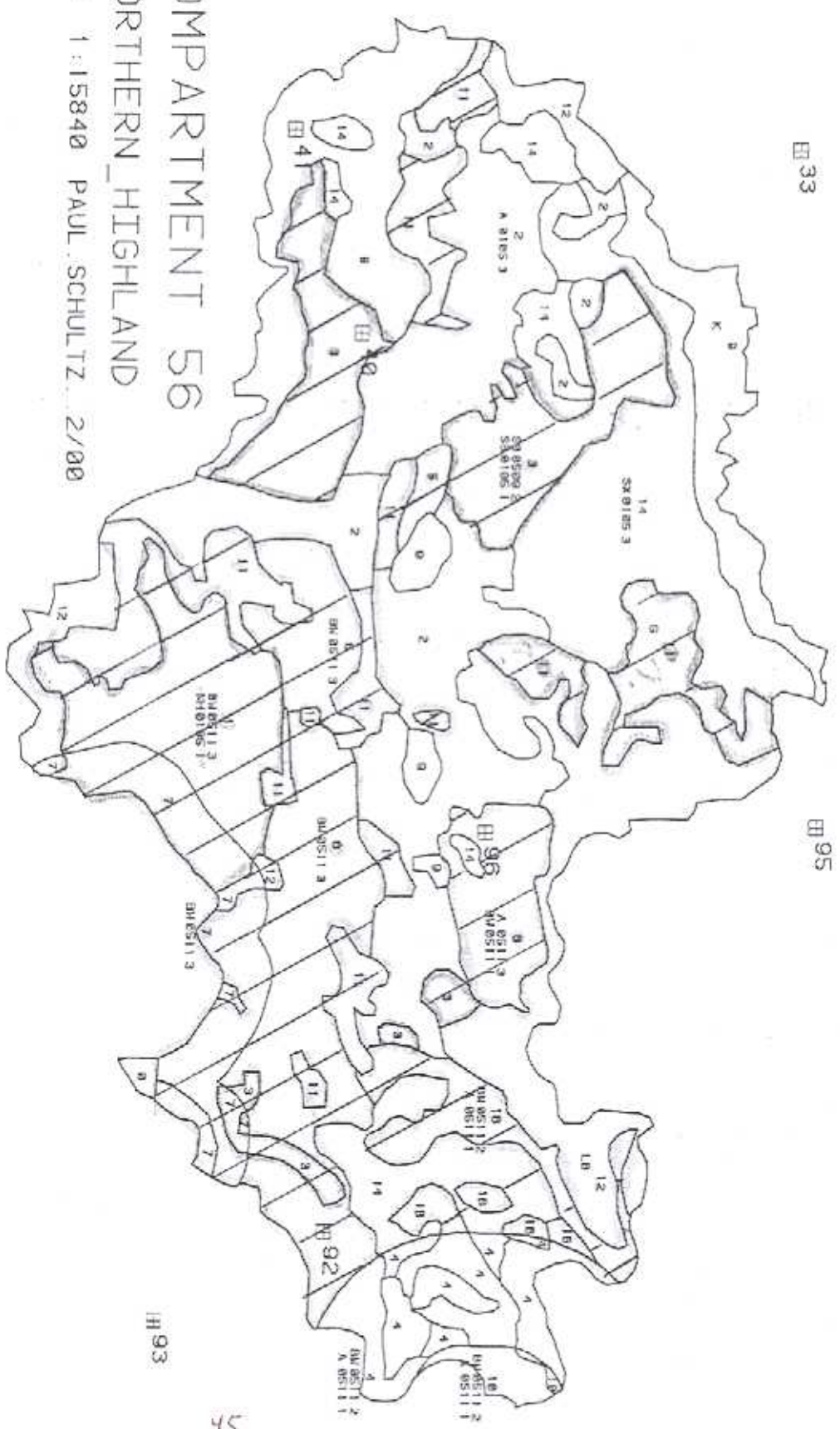
田 33

田 95

# COMPARTMENT 56

## NORTHERN\_HIGHLAND

SCALE 1:15840 PAUL SCHULTZ 2/00



田 83

田 81

田 39

田 35

田 93

田 5

**Compartment 7         Stands 3, 4, & 5**

**Legal Description:** Vilas County T41N R8E Sec 1 & 2 T42N R8E Sec 35 & 36

**Timber types:** Northern Hardwood, Red Maple, & Aspen

**Acres:** ~ 200

See attached compartment map for stands scheduled for harvesting.

**STAND DESCRIPTION**

The potential sale area includes approximately 150 acres of northern hardwood with scattered patches of hemlock-hardwood; 20 acres of aspen with scattered white spruce and white pine; and 30 acres of red maple pole timber. It is located in the Town of Plum Lake at the end of Lake Laura Road and borders the northwest shore of Lake Laura.

Historic files indicate previous harvesting in 1950-51 and 1971-73. The first sale cut all aspen and balsam fir from the northern hardwood stands. Then the second harvest focused on removing "trees with major defects" to improve the quality of the stand for future harvests. A significant amount of northern hardwood saw timber (~2.3 MBF/ac) was harvested, the majority being sugar maple (660 MBF), as well as mid tolerant species including yellow birch, red oak, basswood, and white pine.

**OBJECTIVES**

Designated under the Native Community Management Classification 8 – Lake Laura Loamy Hills, specifically as part of the Managed Old-Growth Restoration Zone and Old-Forest Extended Rotation Zone, the overall forest management objectives include:

- Maintaining a landscape that contains old growth components, yet will still contain early and mid successional parts. These conditions will shift location in the zone over time as disturbance (management) occurs;
- Use of limited active management to increase old-growth forest attributes such as snags and coarse woody debris, and enhance the composition of northern hardwoods by increasing the presence of white pine, yellow birch, white cedar, and hemlock;
- Maintain a forest with large, old trees, and the characteristic species and ecosystem functions associated with old-growth hemlock-hardwood forests;
- Growing large vigorous trees while maintaining early successional types of forest stands, such as aspen and birch as a forest component;
- Producing some economic timber products;
- Maintain the forested and non-forested wetlands.

**ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION**

- Soils including Padus fine sandy loam, and Keweenaw-Karlin Complex, with habitat types of TMC, ATM, ATD, and AOCa, favor northern hardwood and hemlock hardwood timber types. While soils including Croswell sand, Gaastra silt loam, and Fence-Alcona Complex, with habitat types of TMC and the much rarer ArAbVCo, are better suited for red maple and white spruce/white pine timber types.
- Silviculture management will involve single tree selection as well as gaps and group selection to stimulate and encourage regeneration of a new age class in order to move the northern hardwood a step closer to a regulated (uneven aged) stand. Coppice with standards will promote regeneration of aspen and red maple and release spruce and pine regeneration, moving the stands toward that timber type.

**WATER QUALITY. BMPS**

Wisconsin BMP's will be implemented to protect water quality along the shore of Lake Laura. Measures will also include protection for forested and non-forested wetlands included within the sale.



### AESTHETICS

The remoteness of the timber sale area will minimize aesthetic issues and because the majority of the management will implement single tree selection, aesthetic changes will be minimal. Where coppice with standards is implemented, green tree retention should help minimize issues, especially at the end of Lake Laura Road and adjacent to the public boat landing. Logging slash along Lake Laura Road and the public boat landing will be addressed under contract specifications.

### WILDLIFE

Creation of canopy gaps and group tree selection in the northern hardwood will increase vertical structure, providing increased habitat for many song birds including the black-throated blue warbler, Cerulean Warbler, and Swainson's thrush. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds. Snag trees and den trees will remain throughout the stand meeting Green Tree Retention Guidelines to provide habitat for cavity nesting species such as the black-backed wood pecker and marten.

Harvesting aspen and red maple using coppice with standards will provide a contrast of habitat for many years for other game and non-game species.

### ENDANGERED RESOURCES

NHI Portal listed 5 avian species of special concern within the one mile buffer as well as 1 mammal. If foresters observe indications of the mammal or avian species during timber sale establishment, the local Wildlife Biologist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological and historical records do not indicate any known sites in these stands.

### RECREATION

Current uses in the area include hunting, wildlife viewing, and visual aesthetics. Forest management enhances habitat for many game and non-game species and single tree selection minimizes visual changes to the landscape.

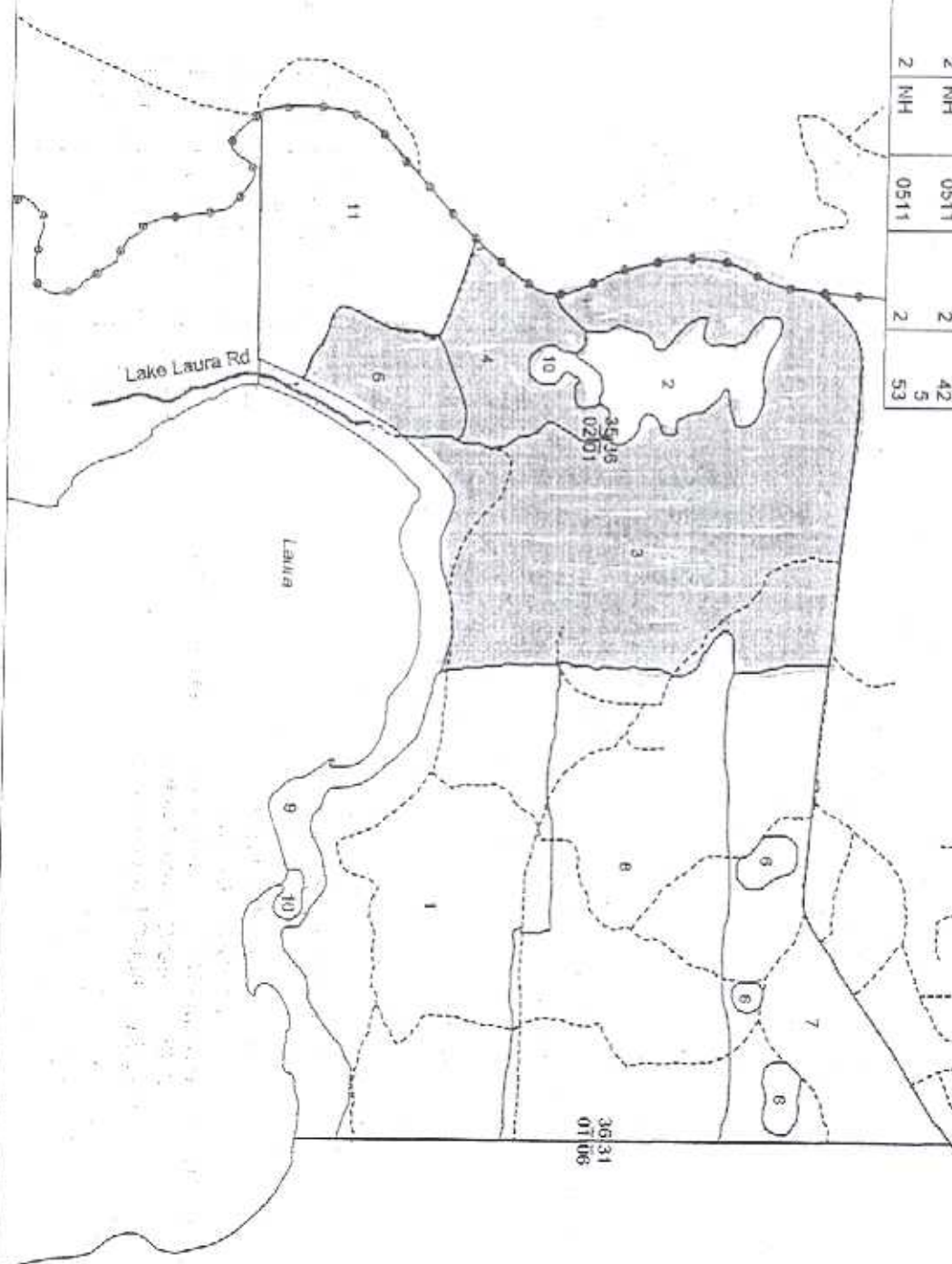
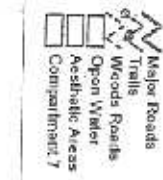
KON 1/29/2010

Kelly Martinko

Stand	P_typ	P_size	P_dens	S_typ	S_size	S_dens	Acres
1	NH	1500	2	NH	1115	1	118
2	A	0511	3				20
3	NH	1500	3	NH	1115	1	158
4	MIR	0511	3				26
5	MIR	0511	3	A	0511	1	18
6	NH	1500	1				7
7	NH	1500	3	NH	1115	1	66
8	NH	1500	2				123
9	NH	1500	2	NH	0511	2	42
10	K	1500					5
11	NH	1115	2	NH	0511	2	53

# COMPARTMENT 7

T42N R08E Sec. 35, 36  
T41N R08E Sec. 01, 02  
Northern Highland State Forest  
Vilas County  
Mapped by Paul Schultz, 12/21/09  
Scale 1:15840  
Compartment Acreage = 636





**Compartment 145   Stands 1, 13, & 14**

**Legal Description:** Vilas County T40N R7E Sec 4, 5, 8, 9, & 17

**Timber types:** Northern Hardwood, Red Oak, White Pine, & Balsam Fir

**Acres:** ~ 650

**See attached compartment map for stands scheduled for harvesting.**

**STAND DESCRIPTION**

The potential sale area includes approximately 635 acres of northern hardwood; 5 acres of white pine with scattered red pine; and 10 acres of balsam fir. It is located in the Town of Arbor Vitae and bordered by Vandercook Road and Witches Lake Road. Several lakes, including Hurrah Lake, Benedict Lake (wild lake designation in the NHAL Master Plan), Scaffold Lake, and 2 smaller unnamed lakes are part of this compartment.

Historic files indicate the north half of the compartment was cut in 1945 using a 12 inch diameter limit. This was followed by a harvest in 1969 which designated all aspen to be harvested from a stand in the northeast part of the compartment. Otherwise, no management has taken place in the past 70 years.

**OBJECTIVES**

Designated under the Native Community Management Classification 12 – Mixed Forest – Big Arbor Vitae/Mann Lake sites, the overall forest management objectives include:

- Management for old-growth characteristics of a forest dominated by red oak, white pine, sugar maple and yellow birch, while providing coarse woody debris, leaving large cull trees and increased snag tree densities;
- Regenerate early and mid successional tree species using variable patch sizes and applying techniques that mimic natural processes;
- Maintain scenic qualities for lake and other users;
- Provide opportunities for research, education, and ecological interpretation;
- Maintain the forested and non-forested wetlands.

The NHAL Master Plan designates Benedict Lake as a Wild Lake; as a result, a 400 foot passive management zone is required. Management within this zone includes the following objectives:

- Maintain the lakes in an undeveloped condition and without significant signs of human influence for recreational, ecological, and habitat values.
- Passively manage, except to remove invasive species, forest restoration (including thinning pine plantations to restore them to a more natural appearing condition), maintain designated trails and primitive canoe campsites.
- Salvage activities following a natural disturbance are not allowed. However, planting native species of trees is allowed for restoration or scenic enhancement purposes.
- Monitor insect and disease outbreaks when they occur and take action only when there is a strong threat to forests outside of the management area.

### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

- Soils including Padus fine sandy loam, Padus-Pence Complex, and Pence sandy loam, with habitat types of PArVVa, AVVb, and ATM, favor high quality red oak, red and white pine, and northern hardwood timber types.
- Silviculture management will involve shelterwood in the red oak stands with the goal of regenerating the timber type.
- Northern hardwood silviculture management will involve single tree selection as well as gaps and group selection to stimulate and encourage regeneration of a new age class in order to move the northern hardwood a step closer to a regulated (uneven aged) stand.

### WATER QUALITY, BMPS

Wisconsin BMP's will be implemented to protect water quality along the shore of Lake Laura. Timber sale design will include protection for forested and non-forested wetlands included within the sale.

### AESTHETICS

Aesthetics along Vandercook and Witches Lake Road will see minimal change during this harvest, as single tree and group tree selection. Lake aesthetics are protected by established no management zones and implementation of WI BMP's.

### WILDLIFE

Creation of canopy gaps and group tree selection in the northern hardwood will increase vertical structure, providing increased habitat for many song birds. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds. Snag trees and den trees will remain throughout the stand meeting Green Tree Retention Guidelines to provide habitat for cavity nesting species.

### ENDANGERED RESOURCES

NHI Portal listed 2 avian species of special concern one within the timber sale area and one within one mile buffer, as well as one mammal. If foresters observe indications of the mammal or avian species during timber sale establishment, the local Wildlife Biologist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological and historical records do not indicate any known sites in these stands.

### RECREATION

Current uses in the area include hunting, snowmobiling, wildlife viewing, and visual aesthetics. Forest management enhances habitat for many game and non-game species and silviculture practices implemented will minimize visual changes to the landscape.

KON 1/29/2010

Kelly Marfinko



Compartment No. 145  
T 40N R 7E Sec. 4, 5, 8, 9, 17

Co. Yilds Fl. No. 16 Photo No. MPE 753  
Mapped by R. Hewatt Date 2-12-63 MPE 754  
Scale 1/4,500 updated 1/77 K. Sloan



**Compartment 229 Stands 2, 5, 6, 8, 9, & 15**

**Legal Description:** Vilas County T42N R5E Sec 1 & 12 & T42N R6E Sec 7

**Timber types:** Aspen, White Birch, & Red Pine

**Acres:** ~ 200

**See attached compartment map for stands scheduled for harvesting.**

**STAND DESCRIPTION**

The potential sale area includes approximately 35 acres of decadent aspen (90+ years), white birch, with scattered oak left along the southeast shore of Clear Lake; 25 acres of oak, white birch, and aspen along Fallon Rd, Rintleman Rd, and Clear Lake Rd; and 125 acres of red pine plantation some of which borders Rintleman Rd. Private land borders the aspen stands along the shore of Clear Lake.

Several timber sales have been established in this compartment over time – 1980, 1986, 1989 and 1992. The timber sale in 1980 was to include the areas along Clear Lake; however, they were not harvested. The timber sale in 1986 included a small portion of the areas along the shore of Clear lake, with minimal harvesting actually taking place.

**OBJECTIVES**

Designated under the Forest Production Management Classification, in the Vilas Sandy Plains North, the overall forest management objective includes increasing the red and white pine forest community type while maintaining aspen as a strong component in mixed stands; manage current levels of red oak, assuring natural regeneration through harvest and site disturbance, increasing the average age of this type; and manage for current levels of white birch, jack pine, and fir spruce.

**ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION**

This harvest will manage the previously unmanaged aesthetic zones along Clear Lake intended to be harvested in 1981 and 1986. The silviculture method will either be clear cut with standards or a seed tree harvest depending on the condition of the stand at the time of establishment. Species such as red oak, red pine, and white pine will be retained as seed trees, habitat and mast for wildlife, as well as aesthetics. The red pine plantations will be thinned to maintain the health and vigor of the trees by using individual tree selection and following silviculture guides for "free thinning". This method focuses on reducing the basal area by removing suppressed and intermediate trees, trees with poor form, and releasing the dominant crowns. Aspen and white birch bordering Rintleman Rd. and Clear Lake Rd. will be salvaged while releasing oak and pine. The soil types include Rubicon sand and Pence sandy loam. These indicate good sites for managing pine species allowing for longer rotation ages.

**WATER QUALITY, BMPS**

WI BMPs will be implemented along the southeast shore of Clear Lake. By implementing these guidelines, water quality will be protected and aesthetics from the water will be mitigated. WI BMP's state no operation of equipment within 50 feet of the ordinary high water mark. Between 50-100 feet use selection harvest favoring long-lived tree species, trees > 12 inches in diameter, and a residual basal area > 60. Some buffer areas will include no harvesting and/or minimal harvesting utilizing single tree selection. If stands include wet areas, measures will be taken to minimize potential effects.



### AESTHETICS

Considerations to minimize visual impacts include reduction of logging slash along the county and town roads. Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Implementing WI BMPs will mitigate aesthetics from the water. Retaining longer lived species including red oak, red pine, and white pine will improve aesthetic opportunities during future harvests, especially along the lake shore.

### WILDLIFE

Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds.

### ENDANGERED RESOURCES

NHI Portal listed one mammalian species of special concern within the project area, and 1 avian species of special concern within one mile. The local Wildlife Specialist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological survey records show no known sites in these stands.

### RECREATION

Current uses in the area include hunting and water based recreation. Forest management enhances habitat for many game species. Longer lived species including red oak, red pine, and white pine will remain for aesthetic purposes.

KON 5/6/2010

Kelly Martinko

# COMPARTMENT 229

T42N R05E Sec. 01, 12

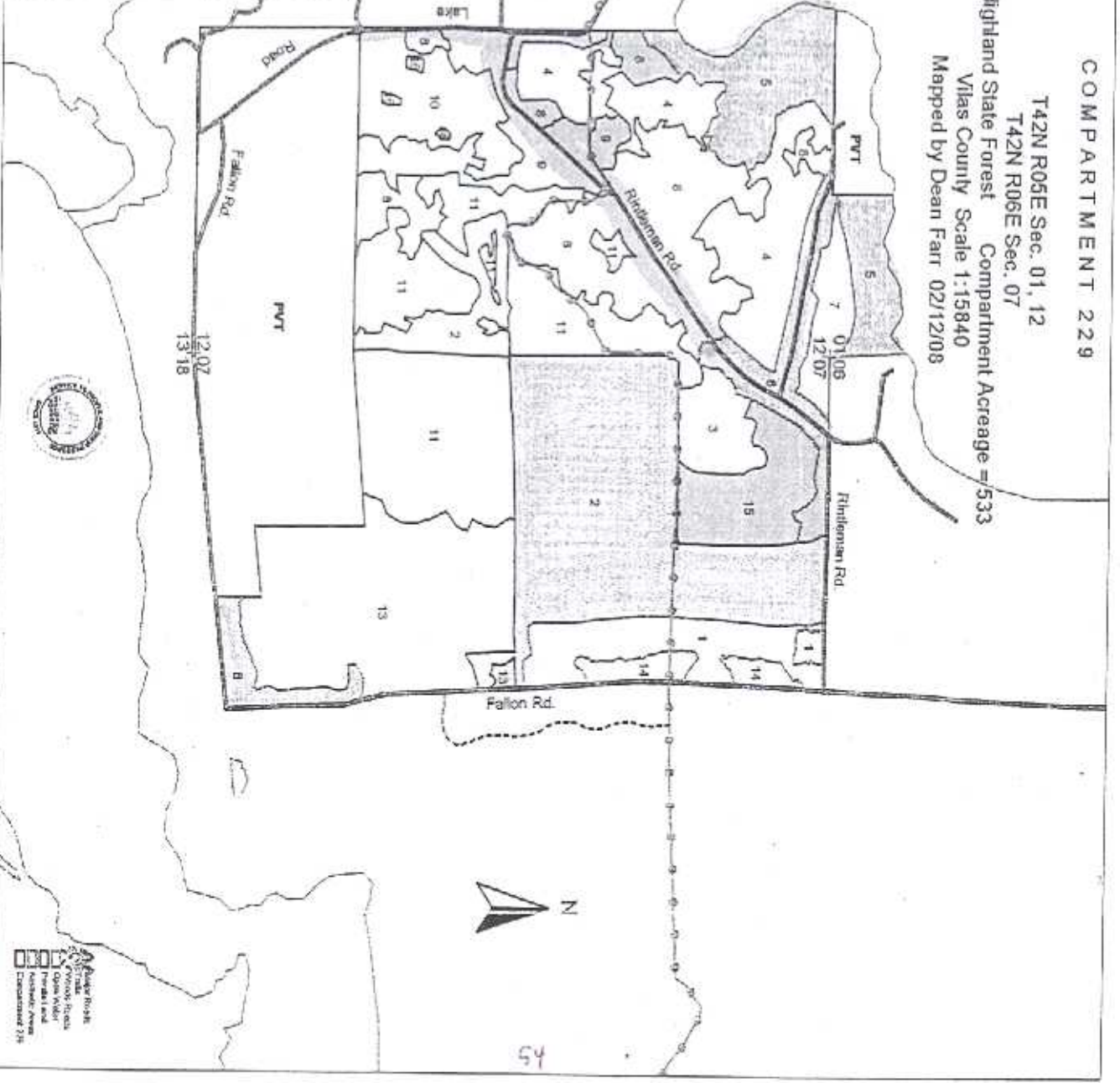
T42N R06E Sec. 07

Northern Highland State Forest

Vilas County Scale 1:15840

Maped by Dean Fair 02/12/08

Stnd	P typ	P siz	P dens	S typ	S siz	S dens	Acres
1	PR	0005	3	PJ	0005	1	22
2	PR	0509	5	PR	0915	1	102
3	PR	1500	2	PW	0509	3	11
4	A	0005	3	MR	0005	2	41
5	O	1115	2	O	0511	3	35
6	O	0511	4	O	1115	2	26
7	PR	0005	3	PW	0005	1	9
8	PW	0509	3	PW	0915	1	63
9	PR	0915	2	PR	0509	3	26
10	A	0005	3	PW	1500	1	22
11	A	0005	3	PW	0915	1	82
13	A	0005	3	MR	0005	1	67
14	PW	0005	3				7
15	PR	0005	2	O	0005	1	19
16	K						1





### AESTHETICS

Considerations to minimize visual impacts include reduction of logging slash along the town road. Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Implementing WI BMPs will mitigate aesthetics from the water. Retaining longer lived species including red oak, red pine, and white pine will improve aesthetic opportunities during future harvests, especially along the lake shore.

### WILDLIFE

Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds.

### ENDANGERED RESOURCES

NH Portal listed one mammalian species of special concern within the project area, and 1 avian species of special concern within one mile. The local Wildlife Specialist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological survey records show no known sites in these stands.

### RECREATION

Current uses in the area include hunting and water based recreation. Forest management enhances habitat for many game species. Longer lived species including red oak, red pine, and white pine will remain for aesthetic purposes.

KON 5/6/2010

Kelly Martinka

Compartment 220    Stands 2, 5, 8, & 9  
Legal Description: Vilas County T42N R6E Sec 7  
Timber types: Aspen, White Birch, & Red Pine  
Acres: ~ 105

See attached compartment map for stands scheduled for harvesting.

#### STAND DESCRIPTION

The potential sale area includes approximately 50 acres of decadent (90 yr old) aspen and white birch left as an aesthetic zone along the north shore of Island Lake; and 55 acres of 76 yr old red pine bordering Fallon. Private land borders a small part of the timber sale area along the east.

Several timber sales have been established in this compartment over time. This includes a pine thinning in 1998; a jack pine clear cut in 1987; and aspen regeneration harvest in 1970.

#### OBJECTIVES

Designated under the Forest Production Management Classification, in the Vilas Sandy Plains North, the overall forest management objective includes increasing the red and white pine forest community type while maintaining aspen as a strong component in mixed stands; manage current levels of red oak, assuring natural regeneration through harvest and site disturbance, increasing the average age of this type; and manage for current levels of white birch, jack pine, and fir spruce.

#### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

Basically this harvest will manage the previously unmanaged aesthetic zone along Island Lake which was scheduled for treatment in 1966. The silviculture method will be clear cut with standards. Species such as red oak, red pine, and white pine will be retained as seed trees, habitat and mast for wildlife, as well as aesthetics. The red pine plantation along Fallon Rd will be thinned to maintain the health and vigor of the stand by using individual tree selection and following silviculture guides for "free thinning". This method focuses on reducing the basal area by removing suppressed and intermediate trees, trees with poor form, and releasing the dominant crowns. The soil types include Rubicon sand and Pence sandy loam. These indicate good sites for managing pine species allowing for longer rotation ages.

#### WATER QUALITY, BMPS

WI BMPs will be implemented along the north shore of Island Lake. By implementing these guidelines, water quality will be protected and aesthetics from the water will be mitigated. WI BMP's state no operation of equipment within 50 feet of the ordinary high water mark. Between 50-100 feet use selection harvest favoring long-lived tree species, trees > 12 inches in diameter, and a residual basal area > 60. Some buffer areas will include no harvesting and/or minimal harvesting utilizing single tree selection. If stands include wet areas, measures will be taken to minimize potential effects.



### AESTHETICS

Considerations to minimize visual impacts include reduction of logging slash along the town road. Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Implementing WI BMPs will mitigate aesthetics from the water. Retaining longer lived species including red oak, red pine, and white pine will improve aesthetic opportunities during future harvests, especially along the lake shore.

### WILDLIFE

Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds.

### ENDANGERED RESOURCES

NH Portal listed one mammalian species of special concern within the project area, and 1 avian species of special concern within one mile. The local Wildlife Specialist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological survey records show no known sites in these stands.

### RECREATION

Current uses in the area include hunting and water based recreation. Forest management enhances habitat for many game species. Longer lived species including red oak, red pine, and white pine will remain for aesthetic purposes.

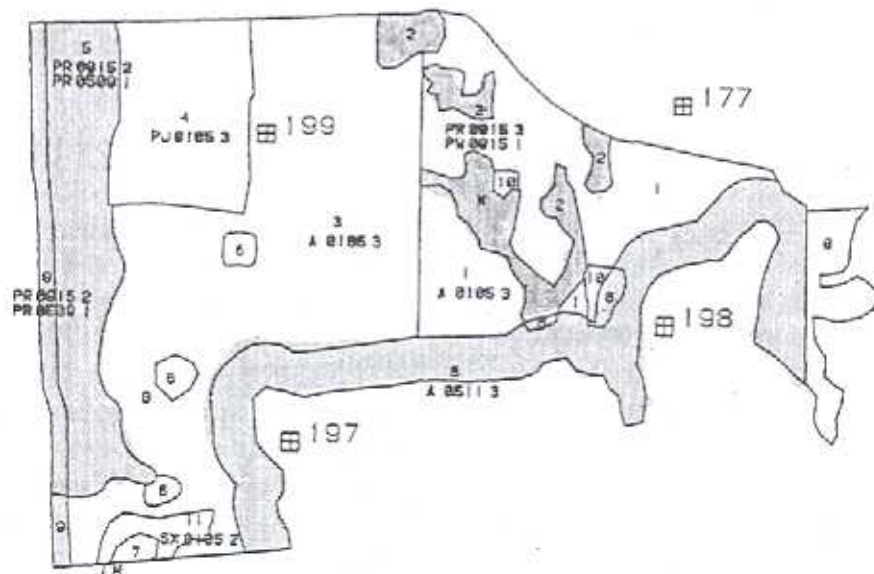
KON 5/6/2010

Kelly Martinko

# COMPARTMENT 220

## NORTHERN\_HIGHLAND

SCALE 1:15840 PAUL SCHULTZ 2/98





**Compartment 228    Stands 3, 6, 7, & 8**

**Legal Description:** Vilas County T42N R6E Sec 6, 31 & T42N R5E 36

**Timber types:** Aspen, White Birch, & Red Pine

**Acres:** ~ 35

See attached compartment map for stands scheduled for harvesting.

#### STAND DESCRIPTION

The potential sale area includes approximately 15 acres of decadent aspen and white birch left as an aesthetic zone along CTH K and Fallon Rd; 15 acres of oak along the east shore of Clear Lake; and 5 acres of red and white pine bordering CTH K. Private land borders a most of the timber sale area along the east.

Several timber sales have been established in this compartment over time – 1981 and 2002.

#### OBJECTIVES

Designated under the Forest Production Management Classification, in the Vilas Sandy Plains North, the overall forest management objective includes increasing the red and white pine forest community type while maintaining aspen as a strong component in mixed stands; manage current levels of red oak, assuring natural regeneration through harvest and site disturbance, increasing the average age of this type; and manage for current levels of white birch, jack pine, and fir spruce.

#### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

Basically this harvest will manage the previously unmanaged aesthetic zone along Clear Lake which was scheduled for treatment in 1981. The silviculture method will either be clear cut with standards or a seed tree harvest depending on the condition of the stand at the time of establishment. Species such as red oak, red pine, and white pine will be retained as seed trees, habitat and mast for wildlife, as well as aesthetics. The pine along CTH K will be thinned to maintain the health and vigor of the trees by using individual tree selection and following silviculture guides for "free thinning". This method focuses on reducing the basal area by removing suppressed and intermediate trees, trees with poor form, and releasing the dominant crowns. Aspen bordering Fallon Rd. will be regenerated using coppice with standards such as oak and pine. The soil types include Rubicon sand and Seelyeville and Markey mucks. These indicate good sites for managing pine species allowing for longer rotation ages.

#### WATER QUALITY, BMPS

WI BMPs will be implemented along the east shore of Clear Lake. By implementing these guidelines, water quality will be protected and aesthetics from the water will be mitigated. WI BMP's state no operation of equipment within 50 feet of the ordinary high water mark. Between 50-100 feet use selection harvest favoring long-lived tree species, trees > 12 inches in diameter, and a residual basal area > 60. Some buffer areas will include no harvesting and/or minimal harvesting utilizing single tree selection. If stands include wet areas, measures will be taken to minimize potential effects.

#### AESTHETICS

Considerations to minimize visual impacts include reduction of logging slash along the county and town roads. Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Implementing WI BMPs will mitigate aesthetics from the water. Retaining longer lived species including red oak, red pine, and white pine will improve aesthetic opportunities during future harvests, especially along the lake shore.

#### WILDLIFE

Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds.

#### ENDANGERED RESOURCES

NH Portal listed one mammalian species of special concern within the project area, and one avian species of special concern. The local Wildlife Specialist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological survey records show no known sites in these stands.

#### RECREATION

Current uses in the area include hunting and water based recreation. Forest management enhances habitat for many game species. Longer lived species including red oak, red pine, and white pine will remain for aesthetic purposes.

KON 5/6/2010

Kelly Martine

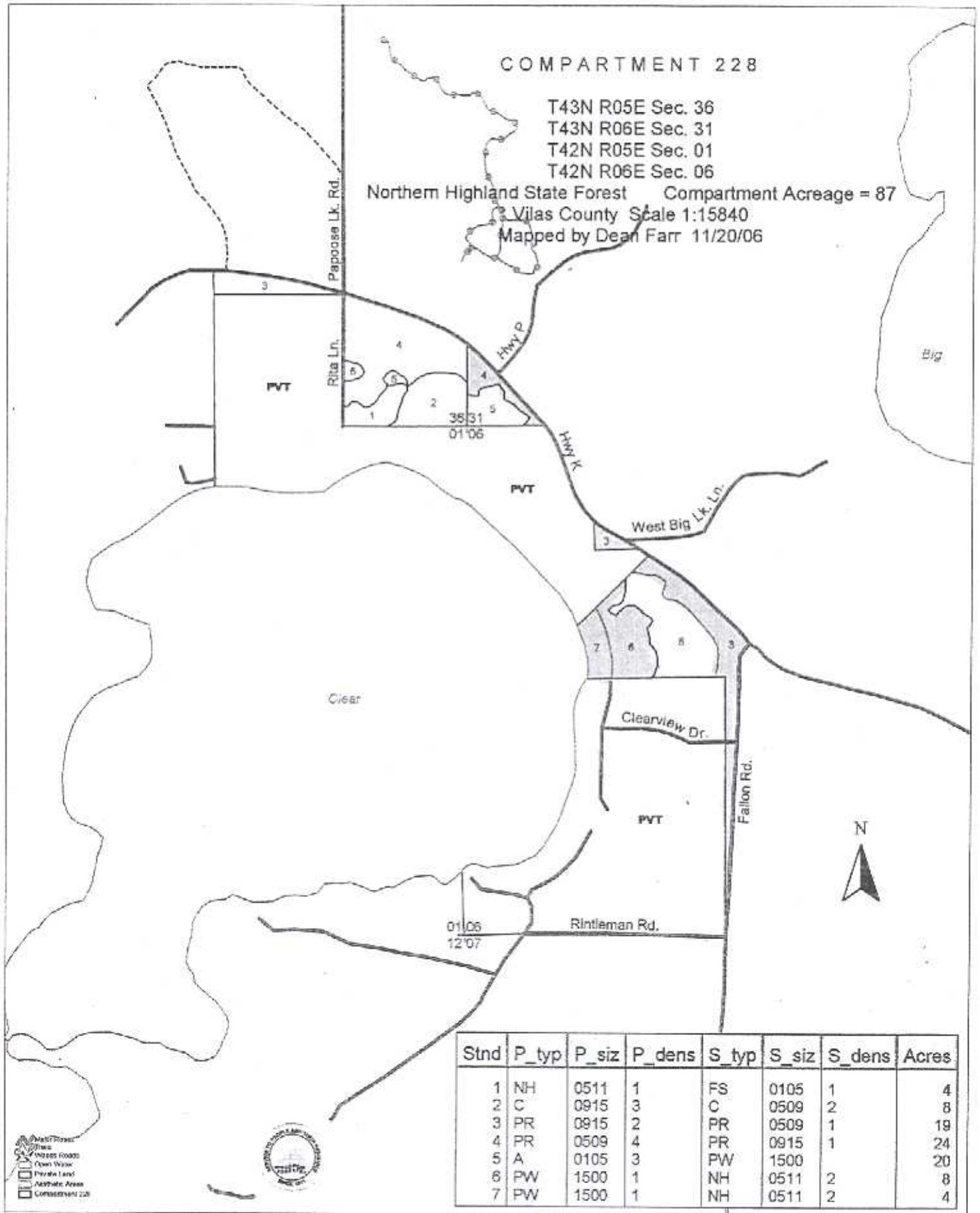


# COMPARTMENT 228

T43N R05E Sec. 36  
T43N R06E Sec. 31  
T42N R05E Sec. 01  
T42N R06E Sec. 06

Northern Highland State Forest      Compartment Acreage = 87

Vilas County      Scale 1:15840  
Mapped by Dean Farr 11/20/06



**Compartment 195** Stands 13, 14, 17, 18, 19, 21, 22, & 25

**Legal Description:** Vilas County T42N R6E Sec 9, 10, 15, & 16

**Timber types:** Aspen, White Birch, Oak, Balsam Fir, Red Pine, & White Pine

**Acres:** ~150

See attached compartment map for stands scheduled for harvesting.

#### STAND DESCRIPTION

The potential sale area includes approximately 35 acres of decadent aspen, white birch, and balsam fir, (60 to 90 years old); 5 acres of red oak; and 110 acres of red pine and white pine plantations. Stands border County Road K and Newcomb Rd. State forest land borders most of the timber sale area with some private land.

Historic files indicate previous harvesting in 1964, 1965, 1973, 1989, 1997, and 2002. Most of the timber sales cut aspen and jack pine. Later timber sales included row thinning of red pine plantations.

#### OBJECTIVES

Designated under the Forest Production Management Classification, in the Vilas Sandy Plains North, the overall forest management objective includes increasing the red and white pine forest community type while maintaining aspen as a strong component in mixed stands; manage current levels of red oak, assuring natural regeneration through harvest and site disturbance, increasing the average age of this type; and manage for current levels of white birch, jack pine, and fir spruce.

#### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

A portion of this harvest will clean up road aesthetic zones left to buffer past timber sales. "Standards" such as red oak, red pine, and white pine will be retained as seed trees, habitat and mast for wildlife, as well as aesthetics. Red and white pine plantations will be thinned using single tree selection to maintain the health and vigor of the trees by using individual tree selection and following silviculture guides for "free thinning". This method focuses on reducing the basal area by removing suppressed and intermediate trees, trees with poor form, and releasing the dominant crowns. Aspen and white birch will be regenerated using even aged management techniques including coppice with standards and clear cut with standards. The soil types include Karlin fine sand, Keweenaw-Karlin Complex, Rubicon sand, and Sayner-Rubicon complex. These soil types indicate good sites for maintaining aspen and birch as components of the stand while moving them towards longer lived species such as red and white pine which have longer rotation ages.

#### WATER QUALITY, BMPS

If stands include wet areas, measures will be taken to address potential impacts.

#### AESTHETICS

Considerations to minimize visual impacts include reduction of logging slash and retaining longer lived species including red oak, red pine, and white pine along CTH K and Newcomb Rd. Green Tree Retention Guidelines will provide many snags and den trees now and in the future.



#### WILDLIFE

Regenerating aspen establishes habitat benefiting many species including grouse and song birds. Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds.

#### ENDANGERED RESOURCES

NHI Portal listed one mammalian and one avian species of special concern within the project area, and one avian species of special concern within one mile. The local Wildlife Specialist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological survey records show no known sites in these stands.

#### RECREATION

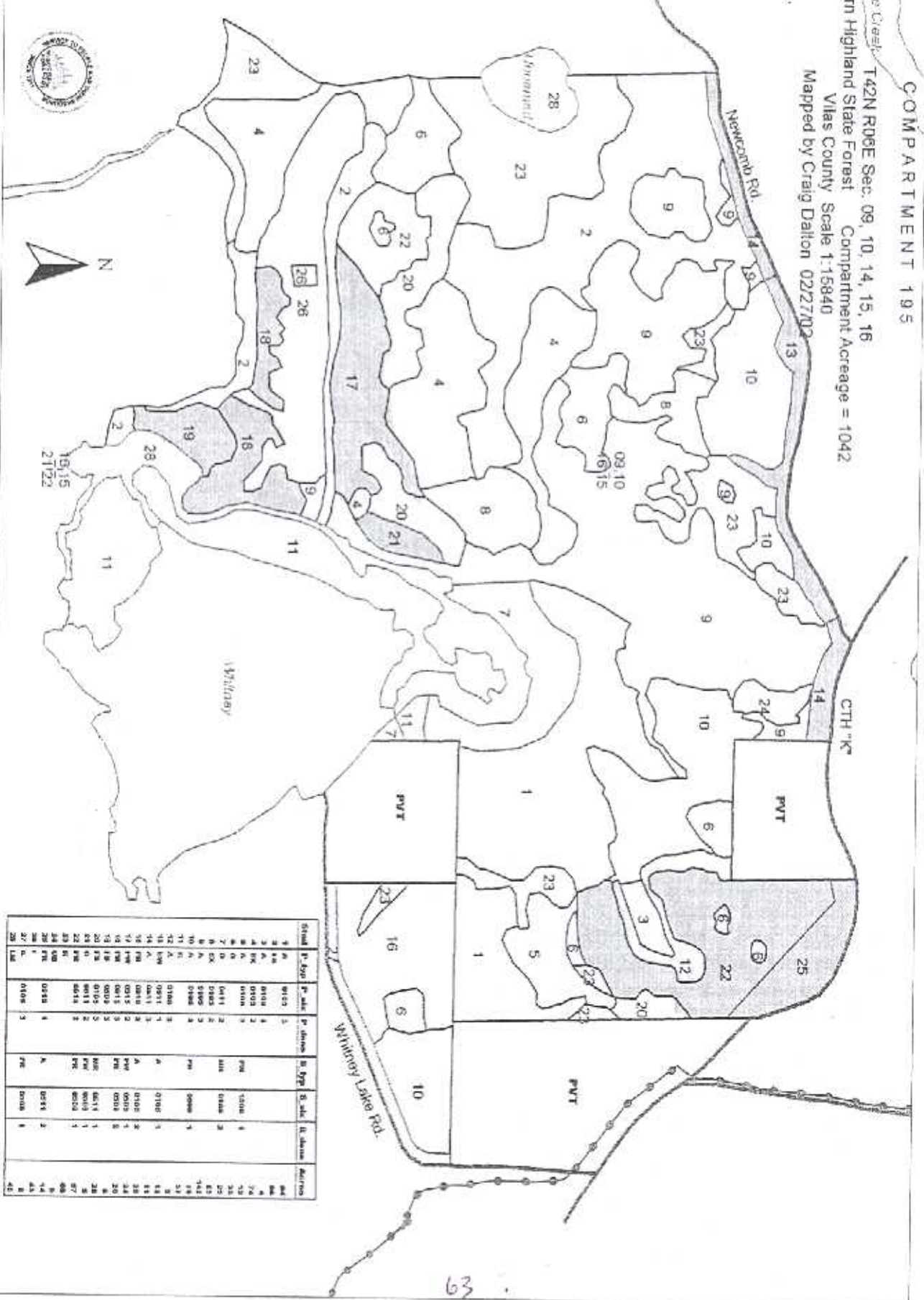
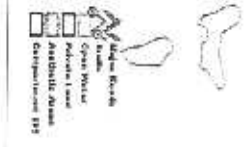
Current uses in the area include hunting. Forest management enhances habitat for many game species. Longer lived species including red oak, red pine, and white pine will remain for aesthetic purposes.

KON 4/10/2009

Kelly Martinka

# COMPARTMENT 195

Rice Creek T42N R06E Sec. 09, 10, 14, 15, 16  
 Northern Highland State Forest  
 Vilas County Scale 1:15840  
 Mapped by Craig Dalton 02/27/02



Stand	Pr. Exp.	Pr. Sale	Pr. Status	Pr. Type	Pr. Date	Pr. Area
1	10	01/01	1	100	01/01	100
2	10	01/01	1	100	01/01	100
3	10	01/01	1	100	01/01	100
4	10	01/01	1	100	01/01	100
5	10	01/01	1	100	01/01	100
6	10	01/01	1	100	01/01	100
7	10	01/01	1	100	01/01	100
8	10	01/01	1	100	01/01	100
9	10	01/01	1	100	01/01	100
10	10	01/01	1	100	01/01	100
11	10	01/01	1	100	01/01	100
12	10	01/01	1	100	01/01	100
13	10	01/01	1	100	01/01	100
14	10	01/01	1	100	01/01	100
15	10	01/01	1	100	01/01	100
16	10	01/01	1	100	01/01	100
17	10	01/01	1	100	01/01	100
18	10	01/01	1	100	01/01	100
19	10	01/01	1	100	01/01	100
20	10	01/01	1	100	01/01	100
21	10	01/01	1	100	01/01	100
22	10	01/01	1	100	01/01	100
23	10	01/01	1	100	01/01	100
24	10	01/01	1	100	01/01	100
25	10	01/01	1	100	01/01	100
26	10	01/01	1	100	01/01	100
27	10	01/01	1	100	01/01	100
28	10	01/01	1	100	01/01	100
29	10	01/01	1	100	01/01	100
30	10	01/01	1	100	01/01	100



Compartment 203    Stands 2, 7, 11, 12, & 13

Legal Description: Vilas County T42N R6E Sec 4, 5, 8, & 9

Timber types: Aspen, White Birch, Northern Hardwood, Red Pine, & White Pine

Acres: ~ 125

See attached compartment map for stands scheduled for harvesting.

#### STAND DESCRIPTION

The potential sale area includes approximately 45 acres of decadent aspen, white birch, and balsam fir, (80 to 90 years old); and 80 acres of red pine and white pine plantations. Stands border County Road K and Rice Creek. State forest land borders most of the timber sale area with minimal private land.

Historic files indicate previous harvesting in 1967, 1981, 1990, and 1999. Most of the timber sales cut aspen, white birch, and jack pine. Later timber sales included row thinning of red pine plantations.

#### OBJECTIVES

Designated under the Forest Production Management Classification, in the Vilas Sandy Plains North, the overall forest management objective includes increasing the red and white pine forest community type while maintaining aspen as a strong component in mixed stands; manage current levels of red oak, assuring natural regeneration through harvest and site disturbance, increasing the average age of this type; and manage for current levels of white birch, jack pine, and fir spruce.

#### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

A portion of this harvest will clean up road and waterway aesthetic zones left to buffer past timber sales. "Standards" such as red oak, red pine, and white pine will be retained as seed trees, habitat and mast for wildlife, as well as aesthetics. Red and white pine plantations will be thinned using single tree selection to maintain the health and vigor of the trees by using individual tree selection and following silviculture guides for "free thinning". This method focuses on reducing the basal area by removing suppressed and intermediate trees, trees with poor form, and releasing the dominant crowns. Aspen and white birch will be regenerated using even aged management techniques including coppice with standards, and clear cut with standards. The soil types include Pence sandy loam, Rubicon sand, Sayner-Rubicon complex, and Seelyville and Markey mucks. These soils indicate good sites for maintaining aspen and birch as components of the stand while moving them towards longer lived species such as red and white pine which have longer rotation ages.

#### WATER QUALITY, BMPS

To protect water quality, required riparian management zones will be established. If stands include wet areas, measures will be taken to minimize potential effects. WI BMP's state no operation of equipment within 50 feet of the ordinary high water mark. Between 50-100 feet use selection harvest favoring long-lived tree species, trees > 12 inches in diameter, and a residual basal area > 60. Some buffer areas will include no harvesting and/or minimal harvesting utilizing single tree selection. If stands include wet areas, measures will be taken to minimize potential effects.

#### AESTHETICS

Considerations to minimize visual impacts include reduction of logging slash and retaining longer lived species including red oak, red pine, and white pine along CTH K. Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Implementing WI BMPs will mitigate aesthetics from the water.

#### WILDLIFE

Regenerating aspen establishes habitat benefiting many species including grouse and song birds. Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds.

#### ENDANGERED RESOURCES

NHI Portal listed a mammalian species of special concern within the project area, and two avian species of special concern within the one mile buffer. Based on review of available habitat information, no impacts are expected as those areas will not be included in the proposed timber sale areas. The local Wildlife Specialist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological survey records show no known sites in these stands.

#### RECREATION

Current uses in the area include hunting snowmobiling. Forest management enhances habitat for many game species. Longer lived species including red oak, red pine, and white pine will remain for aesthetic purposes.

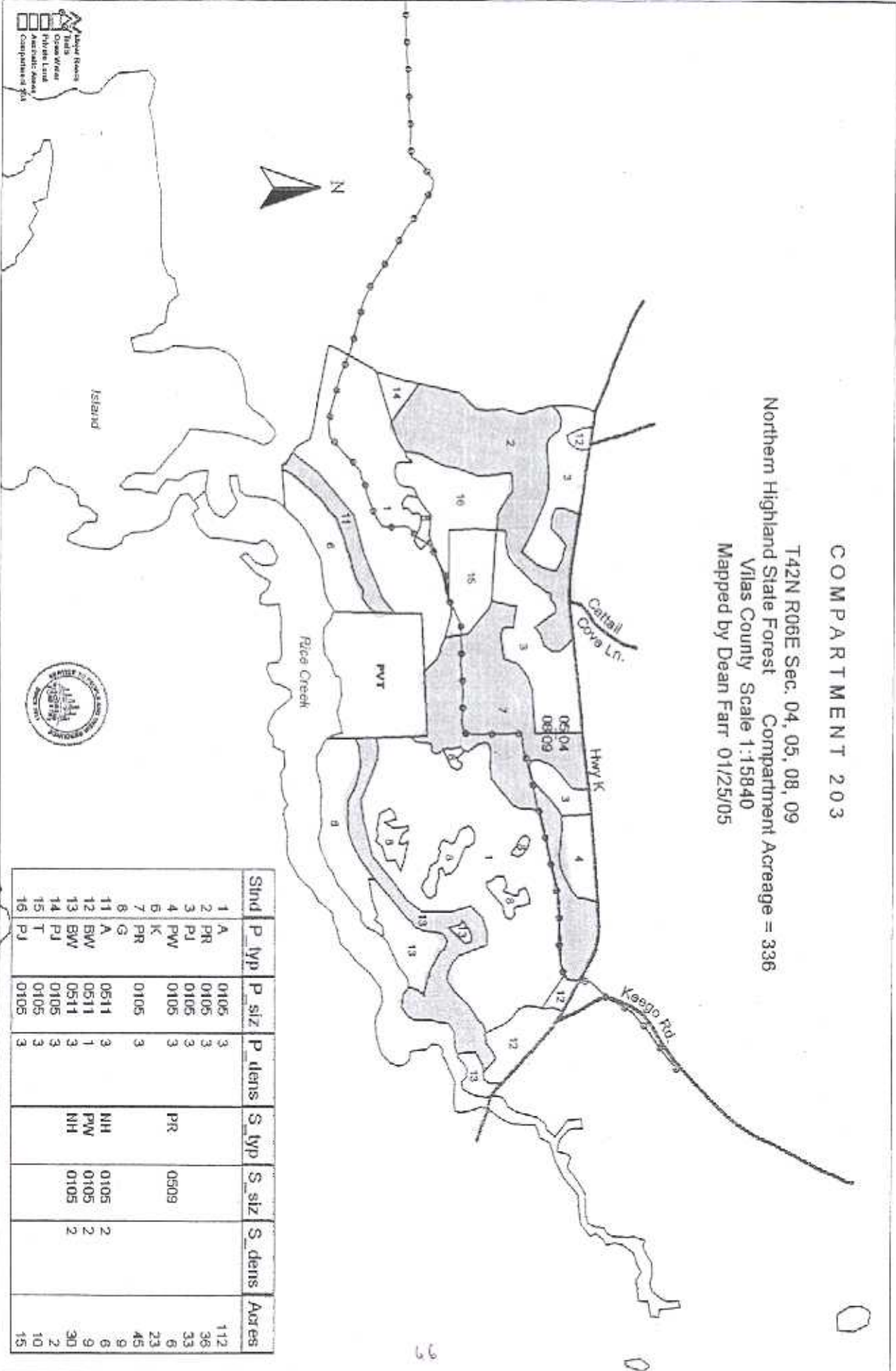
KON 4/10/2009

Kelly Martinko



# COMPARTMENT 203

T42N R06E Sec. 04, 05, 08, 09  
 Northern Highland State Forest    Compartment Acreage = 336  
 Vilas County    Scale 1:15840  
 Mapped by Dean Farr 01/25/05



Stnd	P typ	P siz	P dens	S typ	S siz	S dens	Acres
1 A	0105	3					112
2 PR	0105	3					36
3 PJ	0105	3					33
4 PW	0105	3		PR	0509		6
5 K							23
7 PR	0105	3					45
8 G							9
11 A	0511	3		NH	0105	2	6
12 BW	0511	1		PW	0105	2	9
13 BW	0511	3		NH	0105		30
14 PJ	0105	3					2
15 T	0105	3					10
16 PJ	0105	3					15

**Compartment 204 Stands 1, 9, & 10**

**Legal Description: Vilas County T42N R6E Sec 1, 9, & 10**

**Timber types: Aspen, White Birch, Northern Hardwood, Red Pine, & White Pine**

**Acres: ~ 50**

**See attached compartment map for stands scheduled for harvesting.**

#### STAND DESCRIPTION

The potential sale area includes approximately 35 acres of decadent aspen, white birch, and balsam fir, (80 to 90 years old); and 15 acres of red pine plantation. Stands border County Road K, Newcomb Rd., and Rice Creek. State forest land borders most of the timber sale area with minimal private land.

Historic files indicate previous harvesting in 1967 and 1999. The timber sale harvested aspen, white birch, and balsam fir.

#### OBJECTIVES

Designated under the Forest Production Management Classification, in the Vilas Sandy Plains North, the overall forest management objective includes increasing the red and white pine forest community type while maintaining aspen as a strong component in mixed stands; manage current levels of red oak, assuring natural regeneration through harvest and site disturbance, increasing the average age of this type; and manage for current levels of white birch, jack pine, and fir spruce.

#### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

A portion of this harvest will clean up road and waterway aesthetic zones left to buffer past timber sales. "Standards" such as red oak, red pine, and white pine will be retained as seed trees, habitat and mast for wildlife, as well as aesthetics. Red pine plantation will be thinned using single tree selection to maintain the health and vigor of the trees by using individual tree selection and following silviculture guides for "free thinning". This method focuses on reducing the basal area by removing suppressed and intermediate trees, trees with poor form, and releasing the dominant crowns. Aspen and white birch will be regenerated using even aged management techniques including coppice with standards and clear cut with standards. The soil types include Keweenaw-Karlin Complex and Sayer-Rubicon complex. These soil types indicate good sites for maintaining aspen and white birch as components of the stand while moving them towards longer lived species such as red and white pine which have longer rotation ages.

#### WATER QUALITY, BMPS

To protect water quality along Rice Creek, required riparian management zones will be established. If stands include wet areas, measures will be taken to minimize potential effects. WI BMP's state no operation of equipment within 50 feet of the ordinary high water mark. Between 50-100 feet use selection harvest favoring long-lived tree species, trees > 12 inches in diameter, and a residual basal area > 60. Some buffer areas will include no harvesting and/or minimal harvesting utilizing single tree selection. If stands include wet areas, measures will be taken to minimize potential effects.



### AESTHETICS

Considerations to minimize visual impacts include reduction of logging slash and retaining longer lived species including red oak, red pine, and white pine along CTH K and Newcomb Rd. Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Implementing WI BMPs will mitigate aesthetics from the water.

### WILDLIFE

Regenerating aspen establishes habitat benefiting many species including grouse and song birds. Green Tree Retention Guidelines will provide many snags and den trees now and in the future. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds.

### ENDANGERED RESOURCES

NH Portal listed two avian and one mammalian species of special concern within the project area. The local Wildlife Specialist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological survey records show no known sites in these stands.

### RECREATION

Current uses in the area include hunting. Forest management enhances habitat for many game species. Longer lived species including red oak, red pine, and white pine will remain for aesthetic purposes.

KON 4/10/2009

Kelly Martinko

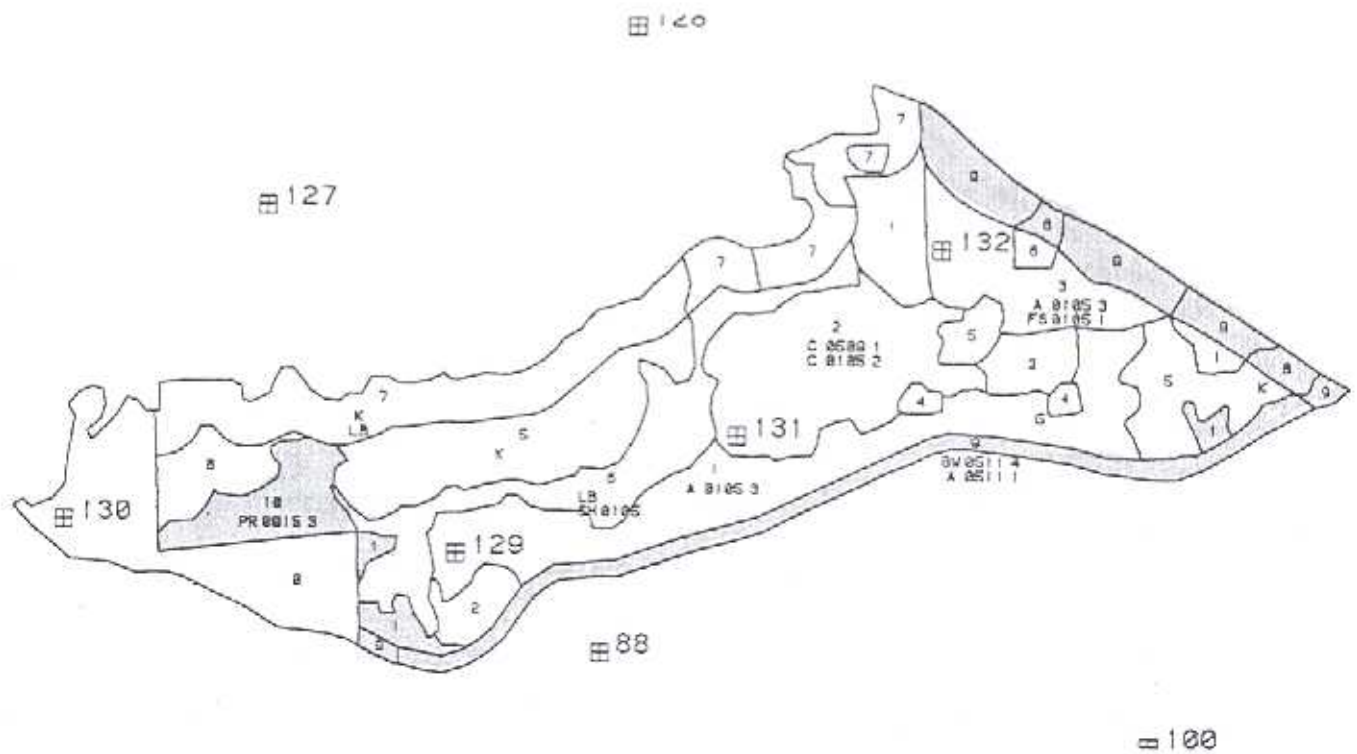
# COMPARTMENT 204

## NORTHERN\_HIGHLAND

SCALE 1:15840

DEAN FARR 8/00

25





Compartment 266   Stands 1      Compartment 265   Stands 1, 5, & 7  
Legal Description: Iron County T43N R4E Sec 1 & 2  
Timber types: Northern Hardwood & Hemlock  
Acres: ~ 150

See attached compartment map for stands scheduled for harvesting.

#### STAND DESCRIPTION

The potential sale area includes approximately 150 acres of northern hardwood with scattered patches of hemlock-hardwood. It is located in the Town of Oma along East Fisher Lake Road and borders portions of East and West Twin Lakes. Private land borders the entire northern boundary and part of the timber sale area in the southwest.

Historic files indicate most of the area was harvested in the mid 1950's prior to State Forest ownership. The file states "it appears that most all of the merchantable logs were removed. Basal area is about 60 in poles and 10 in saw timber." In other words, the stand was "high graded", resulting in a long recovery before this stand is ready for another harvest.

#### OBJECTIVES

Designated under the Forest Production Management Classification, in the Winegar Moraines, the overall forest management objectives include:

- Increasing northern hardwoods with active management, creating multiple age classes, tree sizes and a diversity of tree species;
- Maintaining hemlock-hardwood stands at existing levels while encouraging scattered hemlock in all stands;
- Retaining and encouraging yellow birch, white pine, and hardwood components of aspen stands;
- Regenerating black spruce and tamarack stands through active management while protecting unforested wetlands.

NOTE: A portion of Compartment 265 and 266 border Native Community Area 9 – Catherine Lake Hemlock Hardwoods.

#### ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION

- Soils (Croswell, Lupton-Plein-Cathro complex, Pence sandy loam, Wormet sandy loam, Worchester sandy loam, Denomie silt loam, and Gogebic, very stony Pence) and habitat types (TMC, ATM, ATD, and AOCa) all favor northern hardwood and hemlock hardwood timber types.
- Historic files indicate the previous landowner harvested trees in the late 1950's. Commenting that it was "cut heavily", possibly indicating it was high graded. Otherwise, no management has taken place during the past 60 years.
- Silviculture management will involve single tree selection as well as gaps and group selection to stimulate and encourage regeneration of a new age class in order to move the stand a step closer to a regulated (uneven aged) stand.

#### WATER QUALITY, BMPS

Wisconsin BMP's will be implemented to protect water quality of both East and West Twin Lakes. Measures will also include protection for forested and non-forested wetlands included within the sale.

#### AESTHETICS

Because of single tree selection, aesthetic changes will be minimal. Logging slash along East Fisher Lake Road will be minimized under contract specifications.

#### WILDLIFE

Creation of canopy gaps and group tree selection will increase vertical structure, providing increased habitat for many song birds including the black-throated blue warbler and Swainson's thrush. Horizontal structure increases during harvest activity by accumulation of down woody debris (slash). This adds habitat for many ground dwelling small mammals, insects, and birds. Snag trees and den trees will remain throughout the stand meeting Green Tree Retention Guidelines to provide habitat for cavity nesting species such as the black-backed wood pecker and marten.

#### ENDANGERED RESOURCES

NHI Portal listed 6 avian species of special concern within the one mile buffer as well as 1 mammal. If foresters observe indications of these species during timber sale establishment, the local Wildlife Specialist and/or Endangered Resource Specialist will be contacted regarding locations and protective measures taken if necessary.

Archaeological and historical records do not indicate any known sites in these stands.

#### RECREATION

Current uses in the area include hunting, wildlife viewing, water based recreation, and visual aesthetics. Forest management enhances habitat for many game and non-game species and single tree selection minimizes visual changes to the landscape.

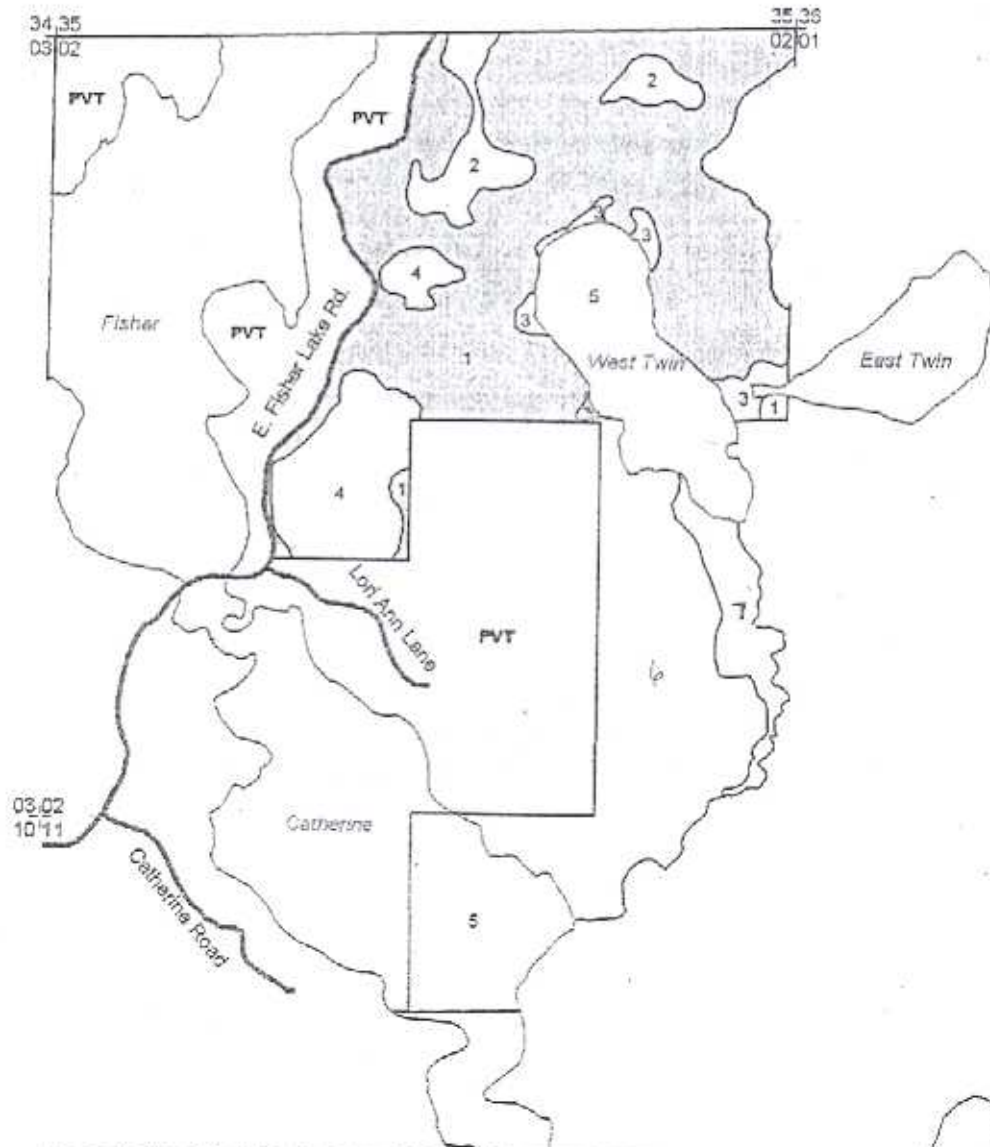
KON 1/28/2010

Kelly Mantinko



# COMPARTMENT 266

T43N R04E Sec. 02, 11  
 Northern Highland State Forest    Compartment Acreage = 313  
 Iron County    Scale 1:15840  
 Mapped by Paul Schultz 09/23/04



Stand	P_type	P_size	P_dens	S_type	S_size	S_dens	Acres
1	NH	1115	2	NH	0511	3	189
2	C	0915	2	C	0509	3	22
3	K						17
4	SX	0105	2	T	0105	1	25
5	L						60

- Major Roads
- Open Water
- Private Land
- Compartment 266

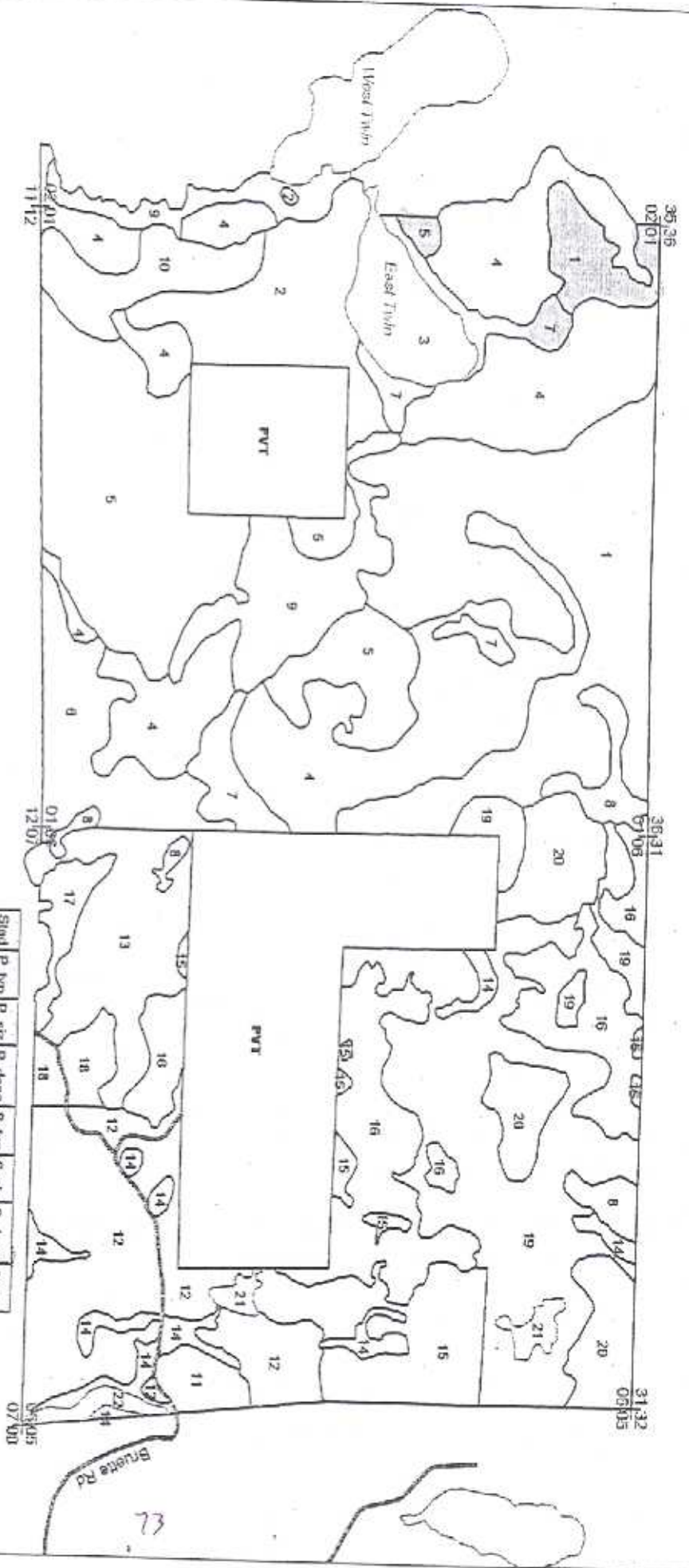


- ☒ Major Roads
- ☐ Open Water
- ☐ Private Land
- ☐ Compartment 265

COMPARTMENT 265

T43N R05E Sec. 06  
T43N R04E Sec. 01, 02

Northern Highland State Forest  
Iron and Vilas County Scale 1:15840  
Mapped by Paul Schultz 02/29/08



Stand	P typ	P size	P dens	S typ	S size	S dens	Acres
1 R01	1115	1500	2 NH	0511	3	137	
2 H	1500		2 NH	0511	3	42	
3 C	0910		2 S8	0509	2	22	
4 C	1500		2 NH	0511	2	176	
5 R01	0511		3 FD	0005	3	168	
6 A	0005		3		3	25	
7 LBA	0005		3		3	25	
8 S8	0005		3		3	25	
9 K	0011		3		3	46	
10 R01	0011		3		3	46	
11 SV	0005		2 G		2	22	
12 A	0511		3		3	8	
13 PR	0005		2		2	80	
14 LBA	0511		4 NH	0511	2	42	
15 A	0511		4 NH	0511	2	42	
16 K	0511		4 NH	0511	2	42	
17 C	0209		3 T	0509	1	79	
18 A	0511		3 M	0511	1	8	
19 A	0005		3		1	10	
20 NH	1115		1 NH	0511	2	114	
21 LAM						41	
22 LAM						6	





Possible Name of Sale: West Sweeney  
Legal Description: T39N-R7E, Sections 10, 14, 15.  
Timber type(s): Northern Hardwood, Oak.  
# Acres: 220  
Compartment 16A

STAND DESCRIPTION: The primary stands to be managed are 1 and 6 of compartment 16. Stand 1 is a northern hardwood/red oak mix. This is a pole to small saw-log sized stand with many of the pole-sized stems consisting of hard maple. The saw-log size class is primarily red oak. Habitat types range from AVVB to ATM. The remaining proposed acreage of stand 6 is dominated by a red oak stand which is 95 years old.

GOALS: All of the proposed sale area is located within the Big Arbor Vitae Loamy Hills Forest Production Classification. Primary goals are to increase the presence and age of red pine and white pine in all types including mixed hardwood stands. Additional goals relate to maintaining and increasing the red oak component of this area.

ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION: Past management for the sale area has included marked harvests and designation of short-lived species. An opportunity exists in the northern hardwood/red oak mix to set the stage for regeneration efforts of hardwood species, oak and pine through canopy gap or group selection management. These harvest techniques are expected to increase the pine and oak components of this northern hardwood stand. The exact level of cutting of each type would have to be determined after a more thorough survey of the stand. Plans are to implement the harvest on only a portion of the fairly sizable stand 1. Post sale scarification and herbicide treatments may be in order for ironwood control. Stand 6 will undergo a shelterwood harvest in order to encourage the regeneration of oak and the establishment of white pine seedlings.

WATER QUALITY, BMPS: Best management practices for water quality will be followed along the shoreline of the Sweeney Lake including uncut riparian buffers.

AESTHETICS: The majority of the proposed acreage is fairly remote. Portions will be visible from the Sweeney Lake boat landing road and possibly along CTH J. The nature of the proposed cutting will have a significant residual overstory intact following harvest. Aesthetic impacts will be mitigated by the stocking densities maintained along with the abundance of mixed conifer understory along the boat landing road. There is also a significant sapling hardwood understory throughout the majority of the sale area.

WILDLIFE: Den and cavity trees will be maintained throughout the northern hardwood area during the marking operation. Wildlife dependent on a mixed forest type will benefit with the maintenance of the hardwood oak type.

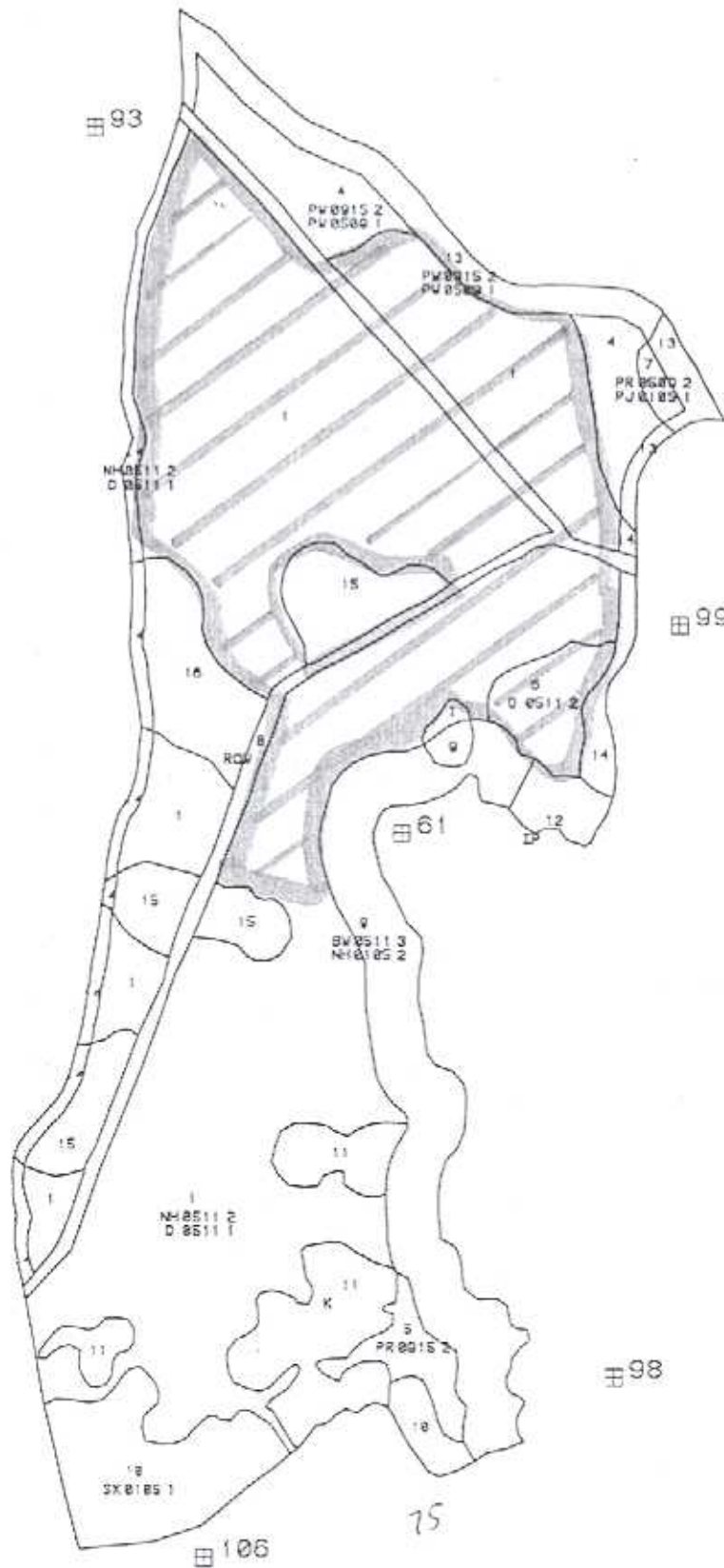
ENDANGERED, ARCHEOLOGICAL, HISTORICAL RESOURCES: The only listed NHI elemental occurrence within the general area was for the hooker orchis which was last observed in 1893. The existing woods road network for the sale area should limit the need for new road construction. No archeological or historical hits are within the sale area.

RECREATION: A designated snowmobile trail runs through part of the sale area. Seasonal decking restrictions on the trail will be implemented. Main recreational use for the area in the fall is hunting which the vegetative manipulation of harvesting should have a beneficial effect on.

# COMPARTMENT 16

## AMERICAN\_LEGION

SCALE 1 15840 PAUL SCHULTZ 12/98





Possible Name of Sale: Woodcock Research Aspen  
Legal Description: T38N-R8E, Sections 7 & 18  
Timber types: Aspen, Jack Pine  
# Acres: 43  
Compartment 30A

STAND DESCRIPTION: The primary stands to be managed are stands 6 and 8 of compartment 30. Stand 6 is a 47-year-old aspen stand which is showing signs of decline. Part of the stand was former WVIC property which was recently acquired. Stand 8 is listed as a 51 year old jack pine plantation. Habitat type is PARV for both stands.

GOALS: The entire proposed sale area is located within the Oneida Sandy Plains Forest Production Management Classification. Goals are to maintain for current levels of oak, increase presence of pine when possible, and maintain the aspen component as a dominant community.

ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION: The mature aspen stand will undergo a regeneration harvest relying on coppice methods to restock the site. Opportunity exists to leave scattered individual red pine, white pine, and oak throughout the area uncut. The aspen will be regenerated and maintained with a chance to slightly increase the pine component of the next stand. The jack pine stand will undergo a regeneration harvest and be replanted back to jack pine.

WATER QUALITY, BMPS: BMP's along the Wisconsin River will be followed. The sandy soils and the alder/lowland brush buffer along the river should help minimize any impacts to water quality.

AESTHETICS: Harvesting impacts of this even-aged regeneration harvest will be lessened somewhat by the scattered red pine, white pine, and oak left uncut throughout the sale area.

WILDLIFE: The regeneration and maintenance of the aspen type will be beneficial for both game and non-games species of wildlife. A diverse stand composition and structure will be maintained for this area. This area is within the project boundary of an ongoing woodcock research project in cooperation with the Wildlife Management Institute.

ENDANGERED, ARCHEOLOGICAL, HISTORICAL RESOURCES: A wood turtle and gray wolf are listed in the NHI for this area. The wood turtle is associated with sandy areas along the riverbank. No harvesting will take place within the immediate vicinity of the riverbank. The area is listed as wolf territory but no known den sites are present. No known archeological or historical elements exist within the proposed harvest area.

RECREATION: A designated snowmobile trail runs through the sale area. Seasonal decking restrictions on the trail will be implemented. The main recreational use for the area in the fall is hunting which will see minimal impacts from harvesting.

2-10-2010  
C. Dalton

# COMPARTMENT 30

T38N R07E Sec. 11, 12, 13, 14, 23, 24

T38N R08E Sec. 07, 18

American Legion State Forest Compartment Acreage = 1092

Oneida County Scale 1:15840

Mapped by Paul Schultz 12/20/05

River Road

PVT

River Road

N



PVT

PVT

PVT

Lyannas Road

11

Stnd	P_type	P_size	P_dens	S_type	S_size	S_dens	Acres
1	A	0105	3	PW	0915		49
2	PR	0509	3				10
3	A	0105	3	MR	0105	1	43
4	PW	0915	2	A	0105	2	29
5	PJ	0509	3	PR	0509	2	8
6	A	0511	4				37
7	T	0509	2	SB	0509	1	7
8	PJ	0509	4	PW	0915		6
9	A	0105	3	PW	1500	1	94
10	A	0105	3	PR	0915	1	50
11	LB						57
12	A	0105	3	O	0511	1	10
13	K						44
15	G						7
16	O	0511	3	PW	1500	1	19
17	PR	1500	3	PR	0915	1	113
18	NH	0511	2	NH	0105	1	20
19	PR	0509	1	PR	0105	2	48
20	A	0105	3	OX	0105	2	118
21	A	0105	3	A	0511		37
22	UB						2
23	A	0105	3	PW	1500		73
27	O	0511	3	O	1115	1	19
28	A	0511	1	A	0105	2	24
30	A	0105	3				125
31	A	0105	3	NH	0105	1	43

- Major Roads
- Trails
- Woods Roads
- Open Water
- Private Land
- Aesthetic Areas
- Compartment 30



Possible Name of Sale: Horsehead Creek  
Legal Description: T38N-R7E, Section 23  
Timber types: Aspen, Red Pine  
# Acres: 54  
Compartment 32A

STAND DESCRIPTION: The primary stands to be managed are stands 1, 2, and 18 of compartment 32. Stand 1 is a 51-year-old aspen stand. Stand 2 is a small saw-log red pine plantation. Stand 18 is a pole-sized young red pine plantation. Habitat type is PARV for all stands.

GOALS: The entire proposed sale area is located within the Oneida Sandy Plains Forest Production Management Classification. Goals are to maintain for current levels of oak, increase presence of pine when possible, and maintain the aspen component as a dominant community.

ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION: The mature aspen stand will undergo a regeneration harvest relying on coppice methods to restock the site. An opportunity exists to leave scattered individual red pine, white pine, and oak throughout the area uncut. The aspen will be regenerated and maintained with a chance to slightly increase the pine component of the next stand. Stand 2 will undergo a marked intermediate thin to maintain vigor and reduce the stocking to a more desired level. Stand 18 will undergo an initial mechanical row thin to facilitate access to the stand and reduce the stocking to more desirable levels.

WATER QUALITY, BMPS: BMP's along the Horsehead Creek will be followed. The sandy soils and the alder/lowland brush buffer along the creek should help minimize any impacts to water quality.

AESTHETICS: Harvesting impacts of this even-aged regeneration harvest will be lessened somewhat by the scattered red pine, white pine, and oak left uncut throughout the sale area. The intermediate thins in the red pine plantations will by nature have a significant residual overstory present following harvest. Aesthetic impacts should be minimal as a result of the plantation thinnings.

WILDLIFE: The regeneration and maintenance of the aspen type will be beneficial for both game and non-games species of wildlife. A diverse stand composition and structure will be maintained for this area. Species dependent on a pine type will be favored as the plantations will take on a more natural structure with each thinning.

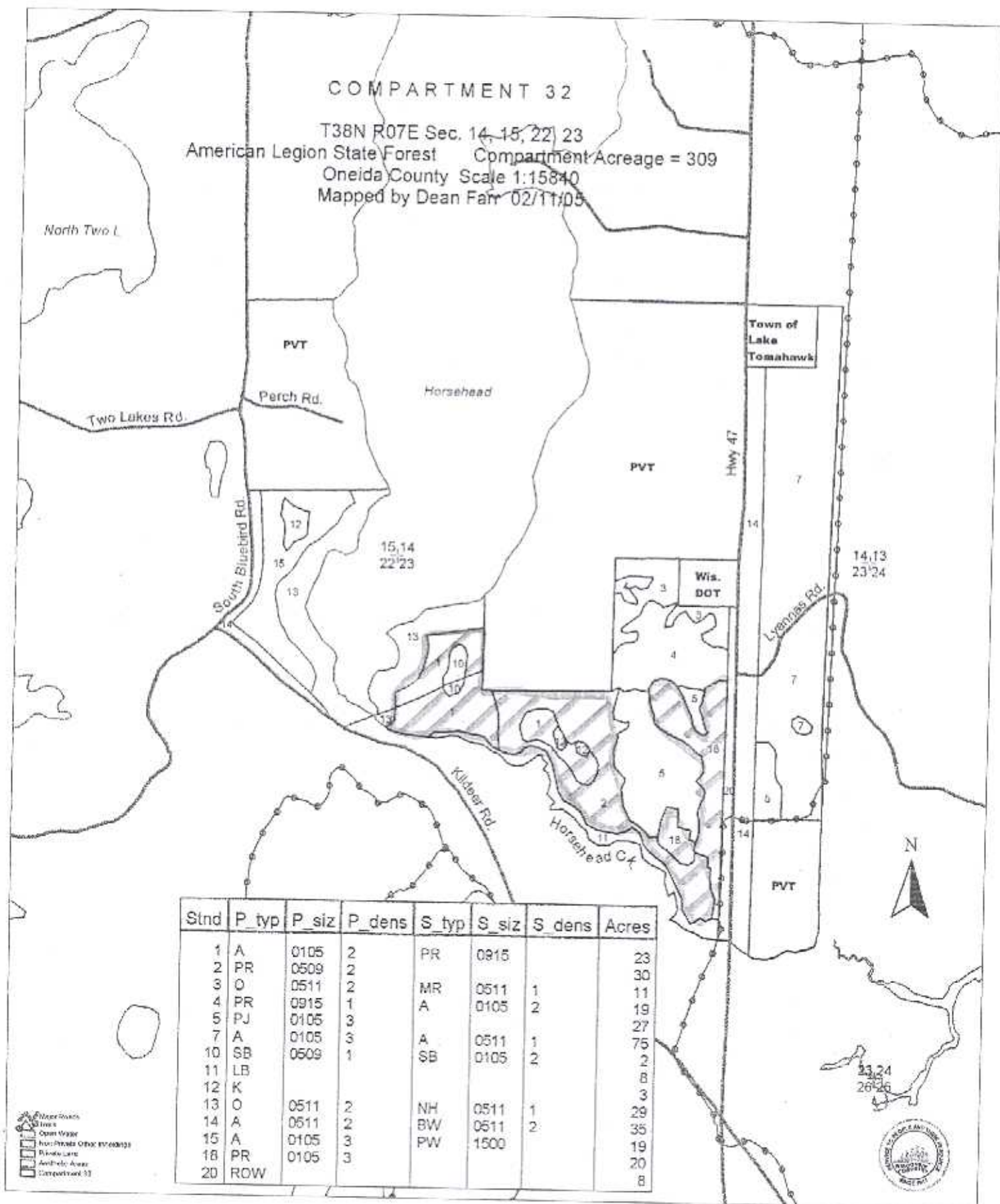
ENDANGERED, ARCHEOLOGICAL, HISTORICAL RESOURCES: A bald eagle nest is listed as present on the shores of Horsehead Lake in the vicinity of the sale area. Manual Code for eagle nests will be followed including an uncut 5 chain buffer. No known archeological or historical elements exist within the proposed harvest area.

RECREATION: A designated snowmobile trail runs along the southeast border of the sale area. Seasonal decking restrictions on the trail will be implemented. The main recreational use for the area in the fall is hunting which will see minimal impacts from harvesting.

2-10-2010  
C. Dalton

# COMPARTMENT 32

T38N R07E Sec. 14, 15, 22, 23  
 American Legion State Forest    Compartment Acreage = 309  
 Oneida County    Scale 1:15840  
 Mapped by Dean Farr 02/11/05





**Possible Name of Sale:** Oxbow Row Thin  
**Legal Description:** T39N-R8E, Section 13  
**Timber types:** Red Pine  
**# Acres:** 70  
**Compartments** 53A & 54A

**STAND DESCRIPTION:** The primary stands to be managed are stands 15 and 16 of compartment 54 and stands 3 and 8 of compartment 53. Stands 8 and 15 are natural saw-log sized red pine stands with a younger age-class of aspen as a secondary type which is found in areas of lower pine stocking. Portions of this pine stand are overstocked. Stands 3 and 16 are roughly 30 year-old overstocked red pine plantations. These plantations are former Plum Creek lands which have recently been acquired. Some areas of the plantation have been row thinned in the recent past other areas are in need of a thin. Habitat type is PARV for both stands.

**GOALS:** The entire proposed sale area is located within the Oneida Sandy Plains Forest Production Management Classification. Goals are to maintain for current levels of oak, increase presence of pine when possible, and maintain the aspen component as a dominant community.

**ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION:** The natural pine stands will undergo an intermediate marked thinning from below to reduce the stocking to more appropriate stocking levels. The plantations will undergo an initial mechanical row thinning. Both thinnings will maintain health and vigor of the pine stands. Biomass harvesting will not be allowed due to nutrient poor soils.

**WATER QUALITY, BMPS:** No waterways are within or adjacent to the harvest areas. A small keg/wetland is found within the natural pine stand. Machinery access through the wetland areas will not be necessary.

**AESTHETICS:** Aesthetic impacts of harvesting on these pine stands undergoing an intermediate thin will be minimized by the nature of the harvest and the high residual stocking of the pine stands.

**WILDLIFE:** Long-term goals for the area are to increase the presence and age of the pine type. These intermediate thins will aid in doing this and provide habitat for wildlife associated with and older pine type.

**ENDANGERED, ARCHEOLOGICAL, HISTORICAL RESOURCES:** No NHI hits are recorded for the area. No known archeological or historical elements exist within the proposed harvest area.

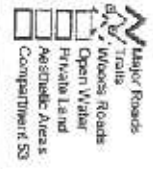
**RECREATION:** No designated trails are in the sale area. The main recreational use for the area in the fall is hunting which will see minimal impacts from harvesting.

4-15-2010  
C. Dalton

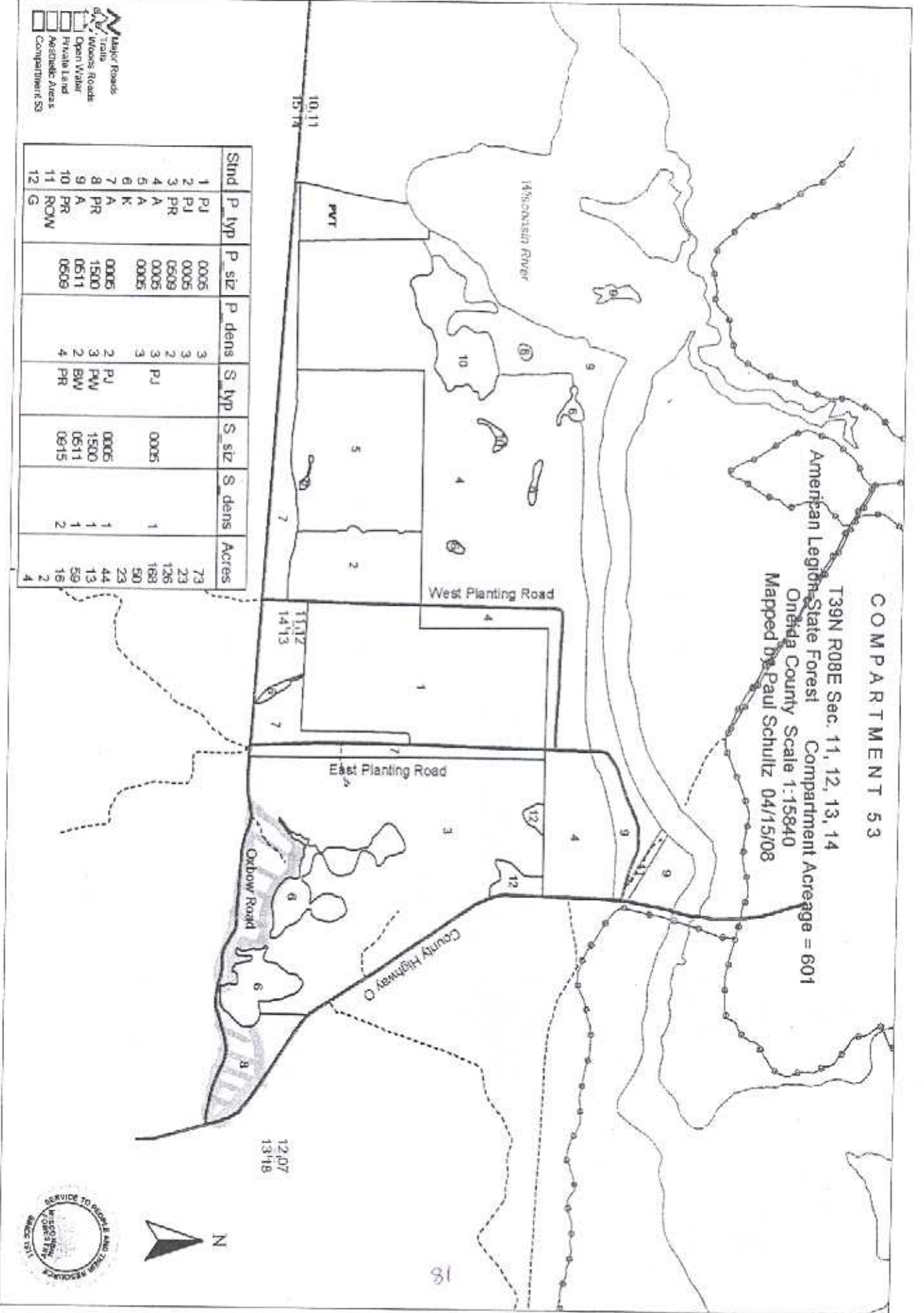
# COMPARTMENT 53

T39N R08E Sec. 11, 12, 13, 14  
 American Legion State Forest  
 Onondaga County Scale 1:15840  
 Mapped by Paul Schultz 04/15/08

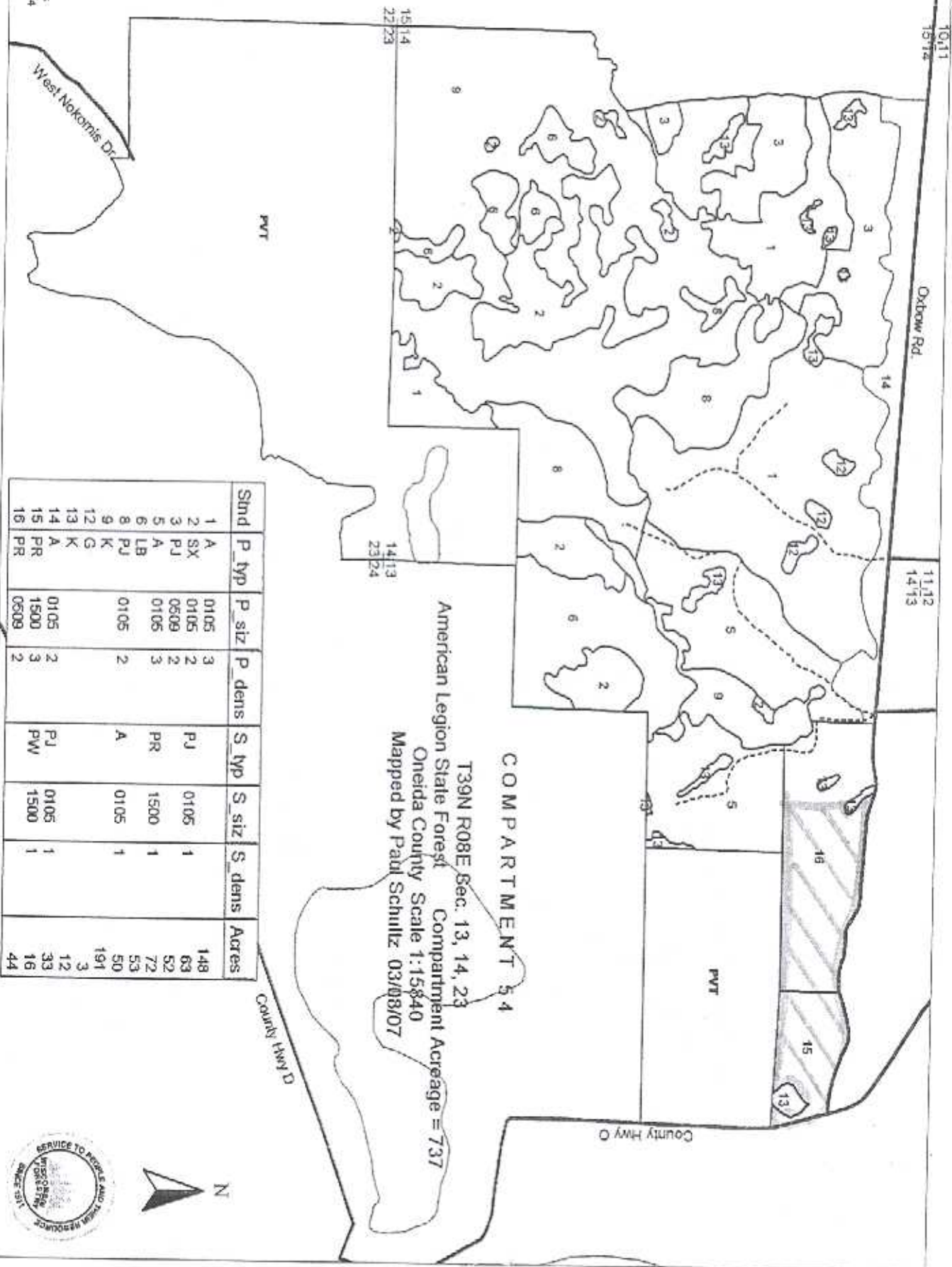
Compartment Acreage = 601



Stand	P typ	P siz	P dens	S typ	S siz	S dens	Acres
1	PJ	0005	3	PJ	0005	1	73
2	PJ	0005	3	PJ	0005	1	23
3	PR	0509	2	PJ	0005	1	126
4	A	0005	3	PJ	0005	1	168
5	A	0005	3	PJ	0005	1	50
6	K	0005	2	PJ	0005	1	23
7	A	0005	2	PJ	0005	1	44
8	PR	1500	3	PJ	0005	1	13
9	A	0511	2	BW	0511	1	59
10	PR	0509	4	PR	0915	2	16
11	ROW						2
12	G						4







COMPARTMENT 54  
 T39N R08E Sec. 13, 14, 23  
 American Legion State Forest  
 Oneida County  
 Scale 1:15840  
 Mapped by Paul Schultz 03/08/07

Stnd	P_typ	P_size	P_dens	S_typ	S_size	S_dens	Acres
1 A	0105	3		PJ	0105	1	148
2 SX	0105	2		PJ	0105	1	63
3 PJ	0609	2		PR	1500	1	52
5 A	0105	3		PR	1500	1	72
6 LB	0105	2		A	0105	1	53
8 PJ	0105	2					50
9 K							191
12 G							3
13 K							12
14 A	0105	2		PJ	0105	1	33
15 PR	1500	3		PW	1500	1	16
16 PR	0609	2					44



Possible Name of Sale: Old 70  
Legal Description: T40N-R7E, Sections 34.  
Timber type(s): Aspen, Oak.  
# Acres: 110  
Compartment 108H

STAND DESCRIPTION: The primary stands to be managed are 1 and 6 of compartment 108. Stand 1 is a sizable middle-aged aspen stand. Past harvest records indicate only merchantable aspen was harvested during the last management activity resulting in areas consisting of a two-aged stand. Stand 6 is a mature oak stand which had the first stage of a shelterwood cut performed roughly 5 years ago. Habitat types range from AVVB to PARVAA.

GOALS: All of the proposed sale area is located within the Big Arbor Vitae Loamy Hills Forest Production Classification. Primary goals are to increase the presence and age of red pine and white pine in all types including mixed hardwood stands. Additional goals relate to maintaining and increasing the red oak component of this area and managing aspen for a variety of stand sizes and ages.

ECOLOGICAL CONSIDERATIONS AND SILVICULTURAL PRESCRIPTION: Stand 6 received an initial shelterwood cut roughly 5 years ago. Portions of this stand have a significant white pine and oak presence in the understory. The goals of this harvest are to release the established regeneration. In stand 1 the aspen is middle-aged for the most part. An opportunity exists to break up this stand for long-term wildlife and aesthetic purposes. Portions of the stand which have a more two-aged component would be potential areas for this approach. Creating age-class diversity by creating small stands of younger aspen throughout the much larger aspen stand would fit into the goals for this forest production classification.

WATER QUALITY, BMPS: No waterways or wetlands are in or adjacent to the proposed sale area.

AESTHETICS: Regeneration harvests along the snowmobile trail will impact the short-term aesthetics. Long-term aesthetics will be enhanced by regenerating portions of this larger aspen stand at this time. Areas cut during this harvest will act as a future screen when the remaining sizable aspen stand is regenerated. Scattered pine and oak will remain uncut within the aspen regeneration areas. The majority of the oak stand is fairly remote. The portions along the town road can have a higher stocking maintained. There is also a significant sapling hardwood and conifer understory mix throughout the majority of this oak stand.

WILDLIFE: Den and cavity trees will be maintained throughout the oak area during the marking operation. Five to ten oak per acre will be left following harvest primarily for wildlife dependent on the oak resource. The creation of more age-class diversity in the aspen stand will benefit wildlife associated with early successional types.

ENDANGERED, ARCHEOLOGICAL, HISTORICAL RESOURCES: No elemental occurrences are listing within the NHI for the proposed sale area. No archeological or historical hits are within the sale area.

RECREATION: A designated snowmobile trail serves as the east boundary of this compartment. As portions of this border will likely be harvested seasonal decking restrictions on the trail will be implemented. Main recreational use for the area in the fall is hunting which the vegetative manipulation of harvesting should have a beneficial effect on.

02/10/2010  
C. Dalton



# COMPARTMENT 108

T40N R07E Sec. 27, 34, 35  
 Northern Highland State Forest    Compartment Acreage = 378  
 Vilas County    Scale 1:15840  
 Mapped by Paul Schultz 11/13/07

